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RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

OCTOBER 13, 1952

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Rock Island

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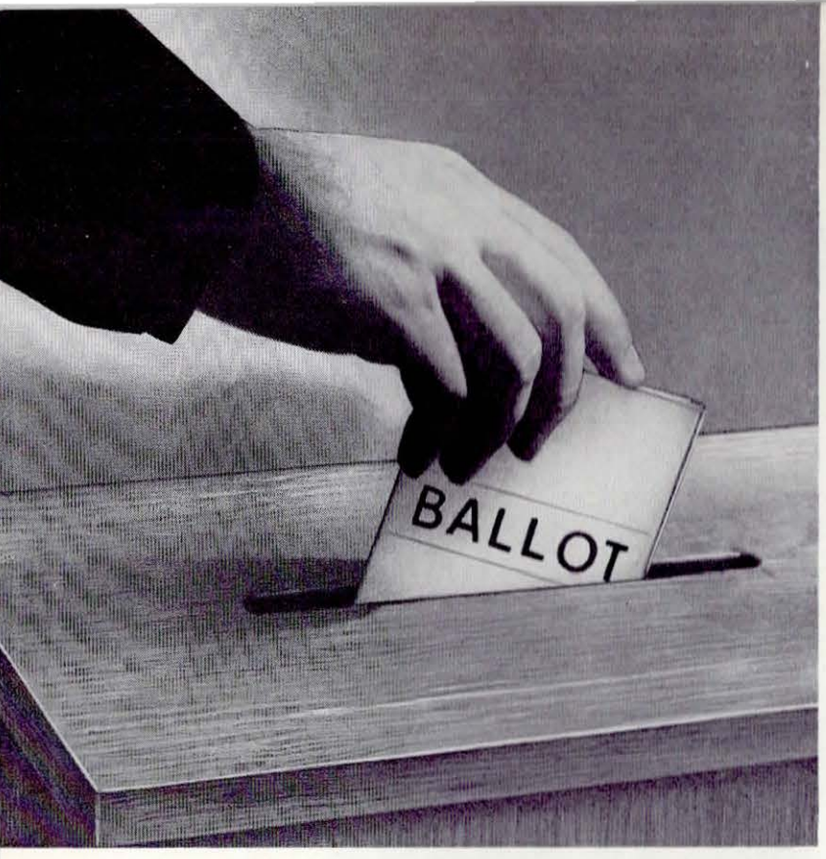


GOOD GOVERNMENT begins with an HONEST BALLOT—

THIS YEAR the American people are facing what may well be our most critical national election since 1861.

In many ways, this too is a year of decision for the railroads, who are engaged single handed in a mighty battle with subsidized and politically favored competitors. Meanwhile, the railroads are shackled in a bewildering mass of discriminatory and antiquated laws and regulations left over from the days when the rails were the nation's sole medium of transportation.

Our industry seeks to strike off those shackles, not only that we may survive as a privately owned enterprise, but also to insure the jobs and the security of the men and women who go to make up our vast payroll. As a matter of fact, on a dollars and cents basis the rank and file have a far bigger stake in this fight than either management or stockholders.

The key to the entire situation lies in the new Congress soon to be chosen.

So before you cast your vote on Election Day, put aside all the slogans and political catch-words, and weigh carefully and objectively the economic philosophy of those who seek your vote for seats in the Senate and House of Representatives.

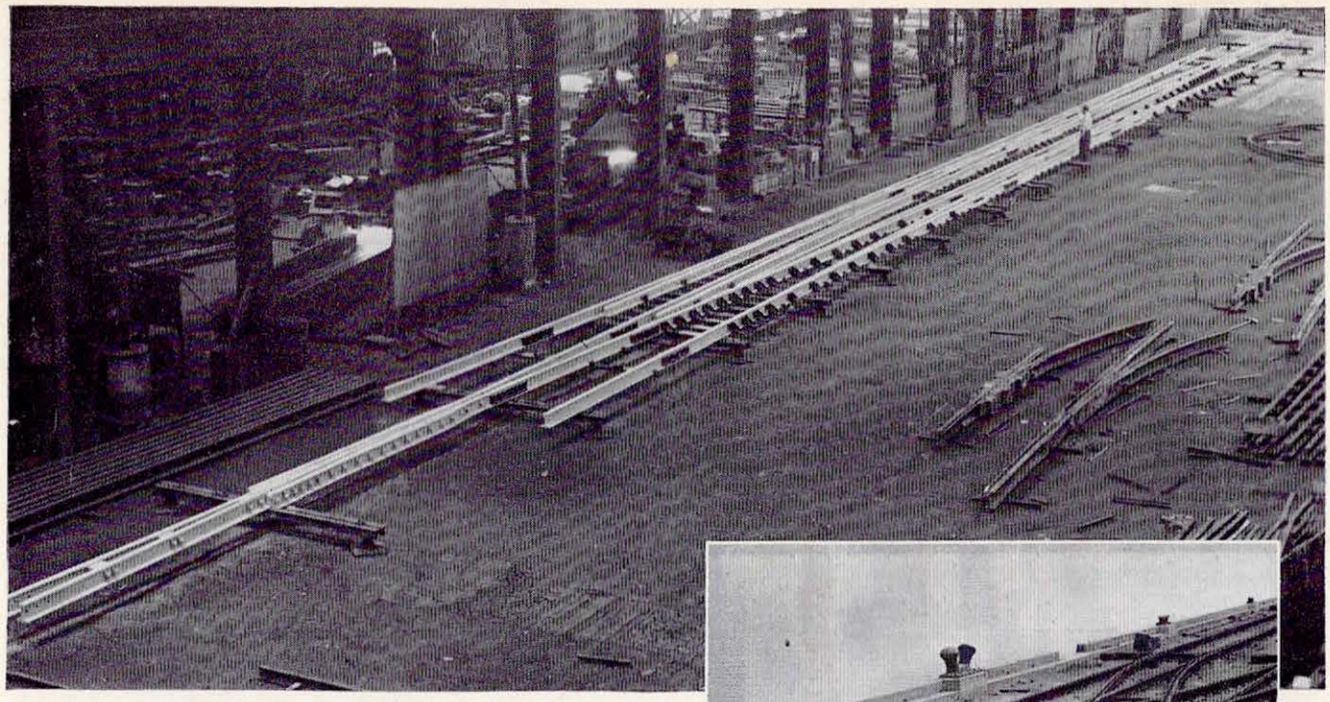
The doctrine of fair play for both management and labor is not the exclusive property of any one political party.

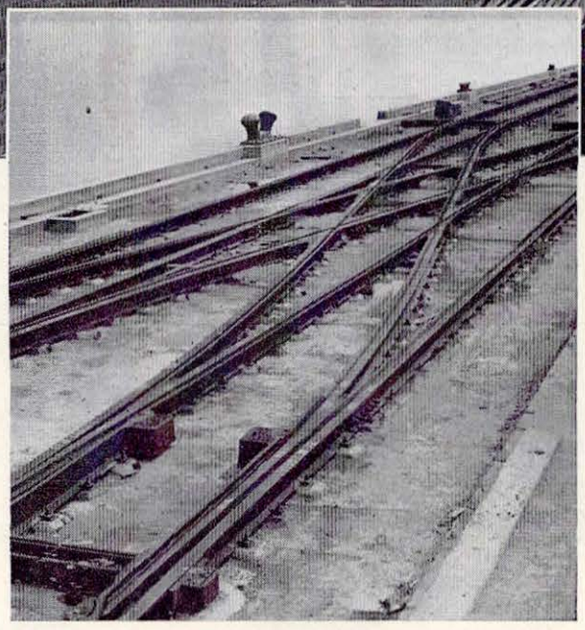
A new Congress, regardless of its party label, dedicated to the proposition that a sound and sensible economy can only be achieved through a minimum of government interference with the normal processes of business, and one that recognizes the inherent dangers of bureaucratic meddling and socialistic tinkering, is specifically the kind of Congress from which we will have the best chance of getting the corrective legislation needed to permit the railroads to do the job the country expects of them.

An honest ballot is something more than a mere legal vote—it is the free expression of your own innermost convictions without regard to the judgment or the opinions of others.

The issues to be joined on November 4th will have a far reaching influence on your future. Think about them now, before it is too late.

BUFFALO BRAKE BEAM CO.
UNIT TRUCK CORPORATION





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Next time you need something unusual in track layouts, we suggest that you check with us. We are equipped to take in stride those big, complicated layouts that require special handling.

Perhaps you have in mind a yard job, or some trackwork for piers, or intricate double-slip crossings, or special industrial trackage. (We've designed and manufactured the largest special industrial trackwork jobs in the country.) Whatever your needs, you'll find us wholly able to handle such assignments. Our engineers will talk your language, help you plan the layouts. Then our shops will build to your specifications.

And don't forget: in addition to trackwork, both special and standard, Bethlehem makes the accessories . . . switch stands, braces, guard rails, frog plates, switch heaters, gage rods, and other items. Whenever you want track or the things that go with it, put in a call to the Bethlehem office nearest you. We'll be glad to co-operate.

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BETHLEHEM, PA.

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BETHLEHEM STEEL

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Superintendent of Communications
Rock Island Railroad

"For more than 30 years P-A-X has been an essential part of Rock Island's Communication System"

"P-A-X automatic telephones have long been an important part of our operations. The original 100-line P-A-X Telephone System, purchased in 1922, is today reliably serving our large shops at Silvis, Illinois. This system has grown and now includes five P-A-X switchboards in two states, and functions as an important part of our more than 7000 miles of Railroad Communication System.

"P-A-X control is most important in traffic and terminal handling . . . it expedites maintenance and repairs . . . helps to move supplies fast and keep down inventories. P-A-X telephones help *everyone*—up and down the line".

As the Rock Island Railroad enters its second century of service, Automatic Electric salutes a leader in railroad progress.

The Rock Island owns ITS OWN P-A-X Telephone System—just as do 39 other leading railroads! Its automatic switchboards and telephones complete all inside calls within just a few seconds any time of the day or night. Made with *railroad dependability,* P-A-X renders a complete service—at a real saving! . . . Get all the facts; learn what P-A-X could do for you!

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P-A-X business telephone systems

AUTOMATIC ELECTRIC

Vol. 133, No. 15 October 13, 1952

RAILWAY AGE

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Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price to railroad employees only in U. S., U. S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, $10 a year; in other countries, $15 a year—two-year subscriptions double the one-year rate. Single copies 50¢, except special issues $1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

ROCK ISLAND ISSUE

EDITORIAL COMMENT:

Rock Island Marks Its 100th Anniversary 97

FEATURE ARTICLES:

Ownership Management 98
Birth of the "New Rock Island" 100
Traffic Keeps the Trains Moving 101
An "Old Hand" at Machine Accounting Develops New Methods 104
Modern Shops and Shop Practices 108
The Spectacular "Rockets" 111
The "Hardest Railroad in the U. S. to Operate" 116
Short Cuts to Operating Economy 120
Rock Island Motor Transit Operations 125
Breaking Terminal Bottlenecks 128
Modern Traffic Control 132
Seeking New Industries 136
Getting More Out of Diesels 141
Highlights in Rock Island History 144
Cutting Debt 147
Communications: Nerve System of a Far-Flung Railroad 150
Research Strengthens the New Rock Island 155
Purchasing & Stores Practices 157
Frozen Foods 159

NEWS FEATURES:

"Non-Ops" Drop Union-Shop Talks With Western Roads; Southeastern Lines Won't Confer on Demand 11
Knudson Predicts I.C.C. Will Change Its Rule to Speed Rate Decisions 12
Scott Outlines Commerce Department's Program of Transportation Research 12
Net Income for 1952 Totals $405 Million 17

DEPARTMENTS:

News of the Railroad World .. 11
New and Improved Products .. 93
Benchmarks and Yardsticks .. 95
Construction 162
Organizations 165
Overseas 167
Supply Trade 167
Equipment and Supplies 169
Car Service 169
Financial 169
Railway Officers 173
Meetings and Conventions .. 180

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Branch Offices: 1081 National Press Building, Washington 4, D. C.—Terminal Tower, Cleveland 13, Ohio.—Terminal Sales Building, Portland 5, Ore.—1127 Wilshire Boulevard, Los Angeles 17, Cal.—244 California Street, San Francisco 11, Cal.—2909 Maple Avenue, Dallas 4, Tex.

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
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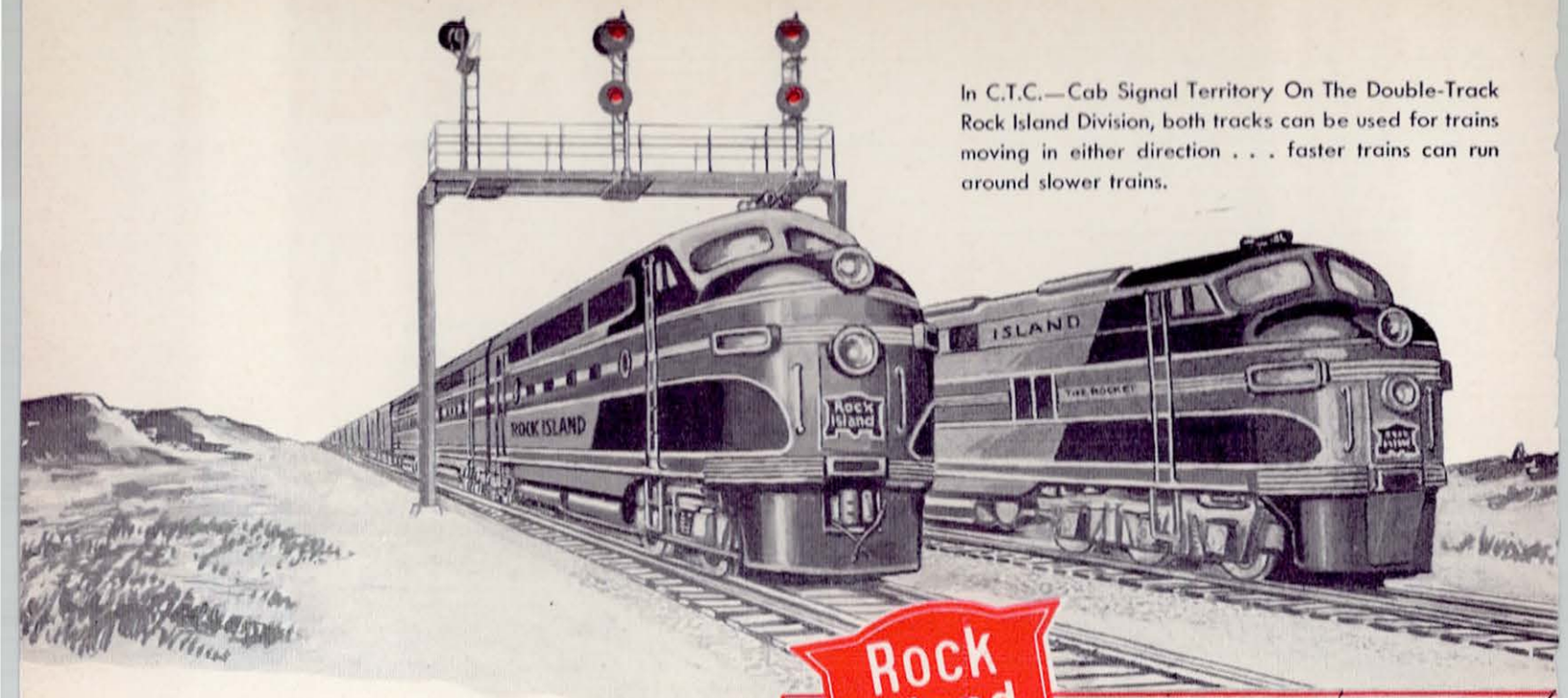
Marine Engineering & Shipping Review Marine Catalog & Directory
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.



In C.T.C.—Cab Signal Territory On The Double-Track Rock Island Division, both tracks can be used for trains moving in either direction . . . faster trains can run around slower trains.

Congratulations,

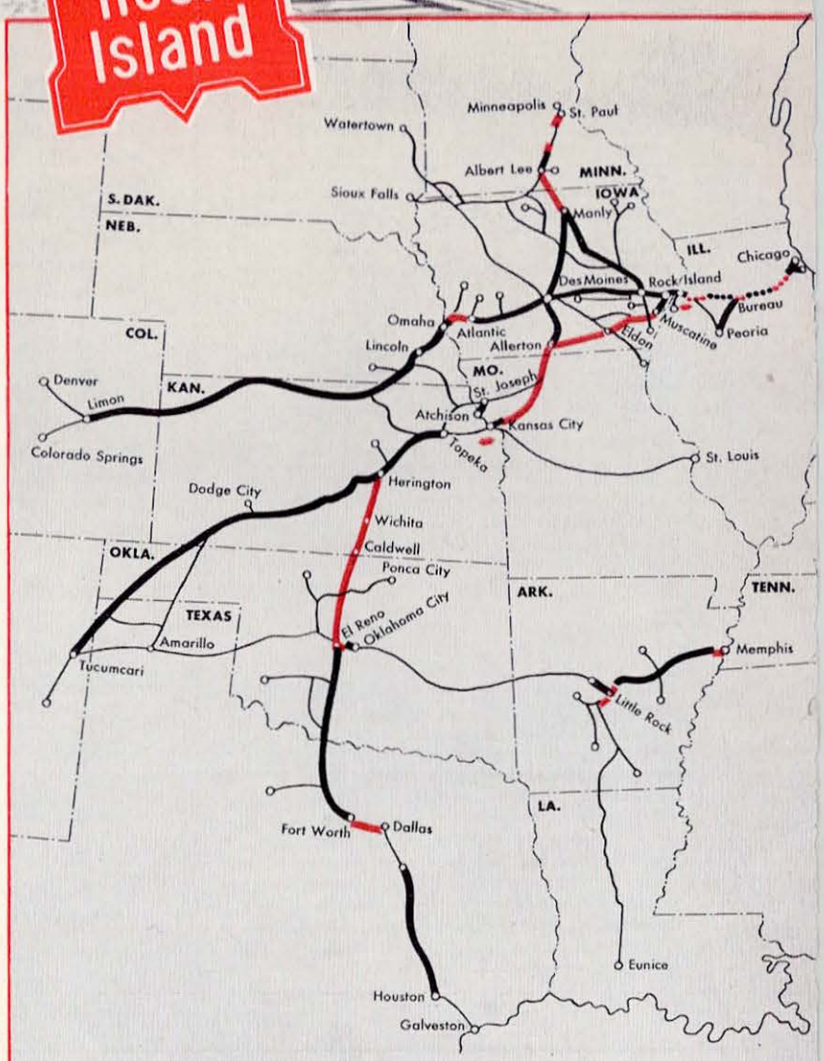
ROCK ISLAND

On 100 Years of PROGRESSIVE RAILROADING

"Union" salutes the Chicago, Rock Island and Pacific Railroad Company on its 100th Anniversary. As long-time suppliers to the Rock Island, we know of the many progressive steps its management has taken to provide better customer service.

Hundreds of miles of modern "Union" C.T.C., automatics, and cab signaling are expediting, safeguarding and raising the efficiency of the Rock Island's famous Rocket trains . . . both passenger and freight. Two car retarder yards are speeding the make-up and handling of the Rocket Freights.

These modern "Union" systems are long-term investments, paying dividends now and laying the groundwork for an even more successful second hundred years on the Rock Island.



LEGEND

- Automatic Signals
- C. T. C.
- Cab Signal and C. T. C.
- Cab Signals and Automatic Signals
- Car Retarder Classification Yards

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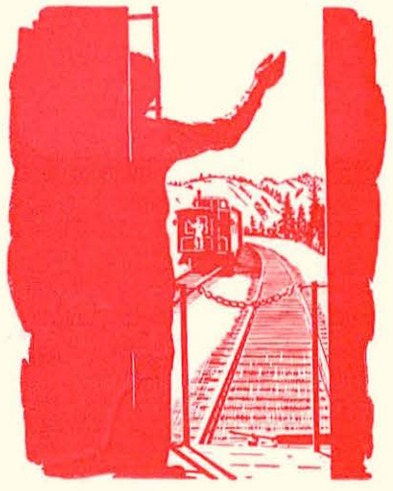
WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eight months	
1952	$6,810,999,610
1951	6,764,406,068
Operating expenses, eight months	
1952	$5,298,347,702
1951	5,345,357,749
Taxes, eight months	
1952	$ 782,437,887
1951	754,296,780
Net railway operating income, eight months	
1952	$ 611,327,838
1951	527,579,745
Net income, estimated, eight months	
1952	$ 405,000,000
1951	339,000,000
Average price railroad stocks	
October 7, 1952	62.64
October 9, 1951	57.35
Car loadings, revenue freight	
39 weeks, 1952	28,017,269
39 weeks, 1951	30,343,699
Average daily freight car surplus	
October 4, 1952	2,644
October 6, 1951	2,252
Average daily freight car shortage	
October 4, 1952	16,199
October 6, 1951	19,789
Freight cars delivered	
August 1952	4,537
August 1951	7,183
Freight cars on order	
September 1, 1952	95,761
September 1, 1951	139,104
Freight cars held for repairs	
September 1, 1952	108,222
September 1, 1951	96,020
Average number railroad employees	
Mid-August 1952	1,219,257
Mid-August 1951	1,297,060



In This Issue . . .

THE CHICAGO, ROCK ISLAND & PACIFIC reached its one-hundredth birthday on October 10. In recognition of that event, and in salute to a company, which, although old in years, is young in every other respect, the editorial and feature sections are devoted entirely to the operations, finances and management of the Rock Island.

INTERSTATE COMMERCE COMMISSIONER KNUDSON, in a speech to the Short Line Association on October 3, told his audience that an unnamed "transportation journal" had quite irresponsibly charged the I.C.C. with being governed by whim in pursuing a restrictive policy against the railroads in their truck operations. The mystery as to the identity of this "transportation journal" will be quickly cleared up by referring to the leading editorial in the September 27 issue of Railway Age. *We'll have some more to say about this next week. Other aspects of Mr. Knudson's speech are reported in the news pages.*

THE ROCK ISLAND'S full and colorful history will be published by Simmons-Boardman Publishing Corporation in 1953 under the title "Iron Road to Empire." The story is being written by William Edward Hayes who, besides being the executive assistant to the road's president, is an author of long-established reputation. Mr. Hayes will be remembered for his vivid short stories against the background of railroad operations which appeared in the Saturday Evening Post, Colliers and other national magazines between 1931 and 1942. As an editor, Mr. Hayes, in 1929, revived for Frank A. Munsey the old Railroad Man's Magazine, the publication now known as Railroad. Research for the new book has been developed and conducted by Arthur W. Large, retired general agricultural agent, who, in his long years of Rock Island service, made the road's historic background his hobby.

In Washington . .

LATEST RAILROAD EARNINGS FIGURES to be compiled by the A.A.R., as summarized in the news pages, continue the mildly encouraging trend which has been in evidence for the past few months. Gross revenues, though down a little (1.2 per cent) for August alone, were about 0.7 per cent ahead of 1951 for the full eight months. That, of course, holds no particular occasion for surprise, with higher Ex Parte 175 rates in effect and traffic, all things considered, holding up fairly well. More gratifying is the ability the roads are demonstrating

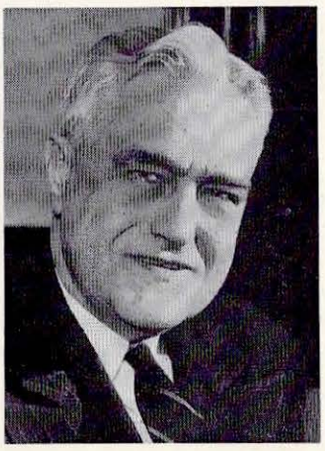
WEEK AT A GLANCE

to keep their operating expenses under close control, as shown by an eight-month decrease of 0.9 per cent and a one-month decrease, in August, of close to 5 per cent.

A LONG-RANGE PROGRAM of "study-research and action" to be undertaken by the Department of Commerce into various phases of the nation's transportation problems was made public last week by Jack Garrett Scott, Under Secretary of Commerce for Transportation. The program, which is completely outlined in the news columns, is intended, Mr. Scott said, to provide a "sound and substantial factual basis" for recommendations as to "proposed legislative and administrative action."

. . . And Elsewhere

SOMETHING BRAND NEW in "railroad" transportation — reputedly backed by the Swedish millionaire industrialist and financier, Axel Wenner-Gren—was unveiled in Germany last week. It is an ultra-streamlined monorail system, running on ball bearings instead of wheels, with power units and cars straddling a single track elevated on concrete supports. These supports reportedly carry steel side flanges gripped by the "train" as an added safety feature, and also small electrical conducting rails which supply the motive power. The two-fifths-size model demonstrated in Germany was said to have reached a speed of 93 m.p.h., while it is claimed that a full-size installation could safely reach speeds of approximately 200 m.p.h. Sponsors are reported to have said that construction of a full-size system will begin "somewhere in the world" within the next year. British Rhodesia is said to be the most likely spot, but there have been rumors to the effect that "it might happen here."



MORE THAN ANY OTHER ONE MAN, President J. D. Farrington is responsible for the "New Rock Island." In distant years, "when history separates the greater from the lesser," there is little doubt, other railroad men who should know have told Railway Age, *that Mr. Farrington will rank among the leading railroad men of the twentieth century.*

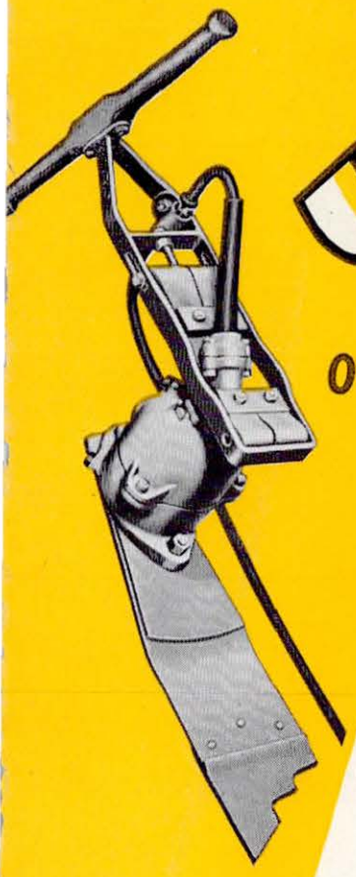
MORE THAN 20 PER CENT of today's air travelers use "charge it" credit cards for their tickets, according to the International Air Transport Association. The convenience of deferring payments for air line tickets through the Universal Air Travel Plan is growing in popularity, particularly among business men, with 38,000 new air travel cards issued during the past year for travel over the association's 71 member lines.

CONSIDERING THE LONG, and thus far largely unsuccessful, efforts of the railroads to secure some measure of relief from onerous and outmoded regulation, railroad men will be surprised, to put it mildly, to hear that their industry "dominates" the Republican party. Yet that's what John M. Redding, Assistant Postmaster General, told last week's New York convention of the American Trucking Associations, when he declared that a Republican administration "would stymie all plans for truck-transportation expansion." The obvious facts, of course, are (1) that the transportation problem should not be a political issue at all—witness the Reed-Bulwinkle Act, co-sponsored by a Republican senator and a Democratic congressman, and applicable to trucks as well as to railroads; and (2) that the railroads, as an industry, are totally lacking in political influence—look at the record! It's only fair to add that A.T.A. officials themselves appear to have been both surprised and embarrassed—to the extent of publicly apologizing—for Mr. Redding's transformation of a business convention into a political forum.

To Rock Island

OUR GOOD FRIENDS and LONG-TIME USERS OF

JACKSON TAMPING EQUIPMENT



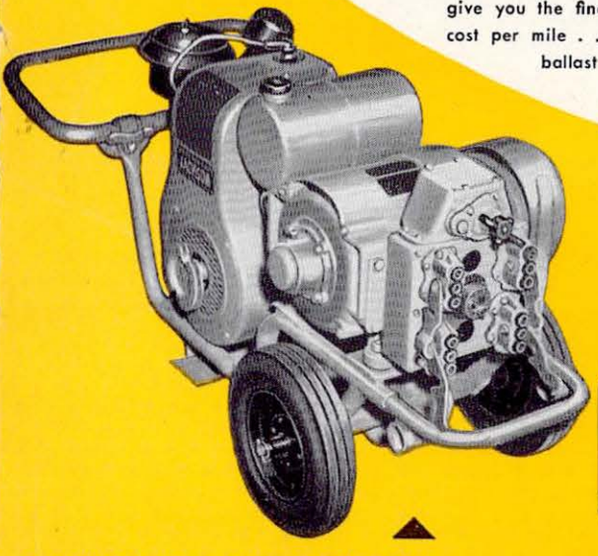
OUR HEARTIEST *Congratulations*

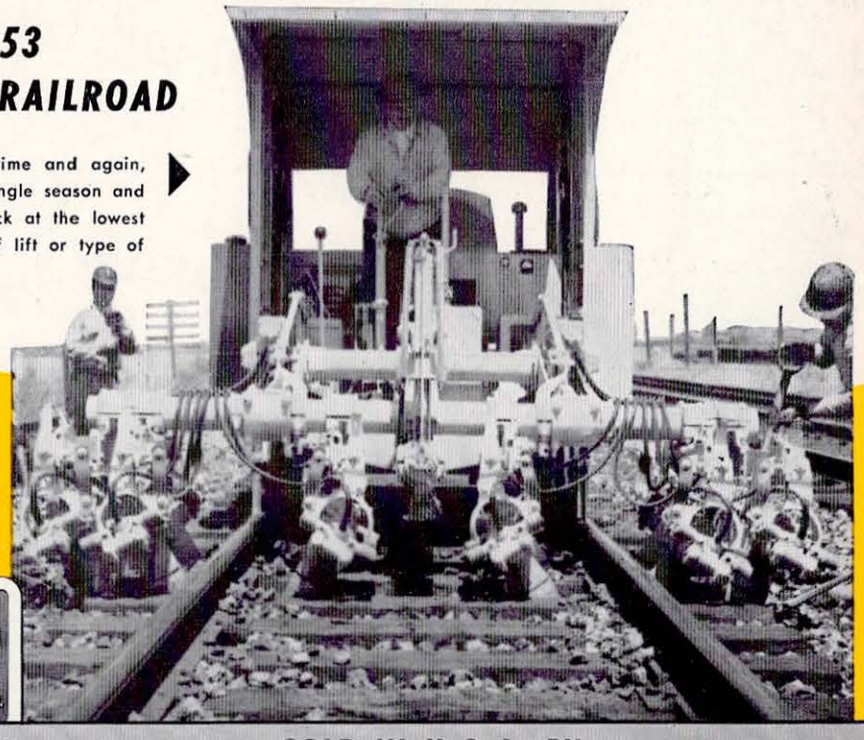
on your 100th Anniversary, and our very best wishes for a continuance of the outstanding progress and development which has marked the first 100 years of your history.

We are mighty happy that Jackson Unit Tie Tampers and Power Plants have played an important part in Rock Island's track building and maintenance over a long period of years; and no less gratified that Rock Island, among the first to recognize the unmatched advantages of the Jackson Multiple Tamper, has continued to add to the number of these machines operating on its famous system.

DESERVING OF TOP SPOT ON THE 1953 BUDGET OF EVERY PROGRESSIVE RAILROAD

THE JACKSON MULTIPLE has proved, time and again, that it will save its cost in a single season and give you the finest possible track at the lowest cost per mile . . . regardless of lift or type of ballast used.





MFD. BY JACKSON VIBRATORS INC. LUDINGTON, MICH.

A JACKSON PORTABLE POWER PLANT and two or four Unit Tampers constitutes the finest possible outfit for boosting section gang productivity. They may also be grouped for extra-gang service with results that are exceeded only by the Jackson Multiple. **Why not jot down these items on your budget memorandum, right NOW?**

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ELECTRIC TAMPER & EQUIPMENT CO.

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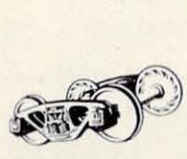
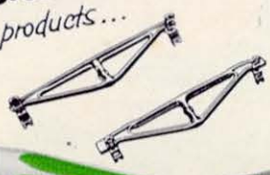
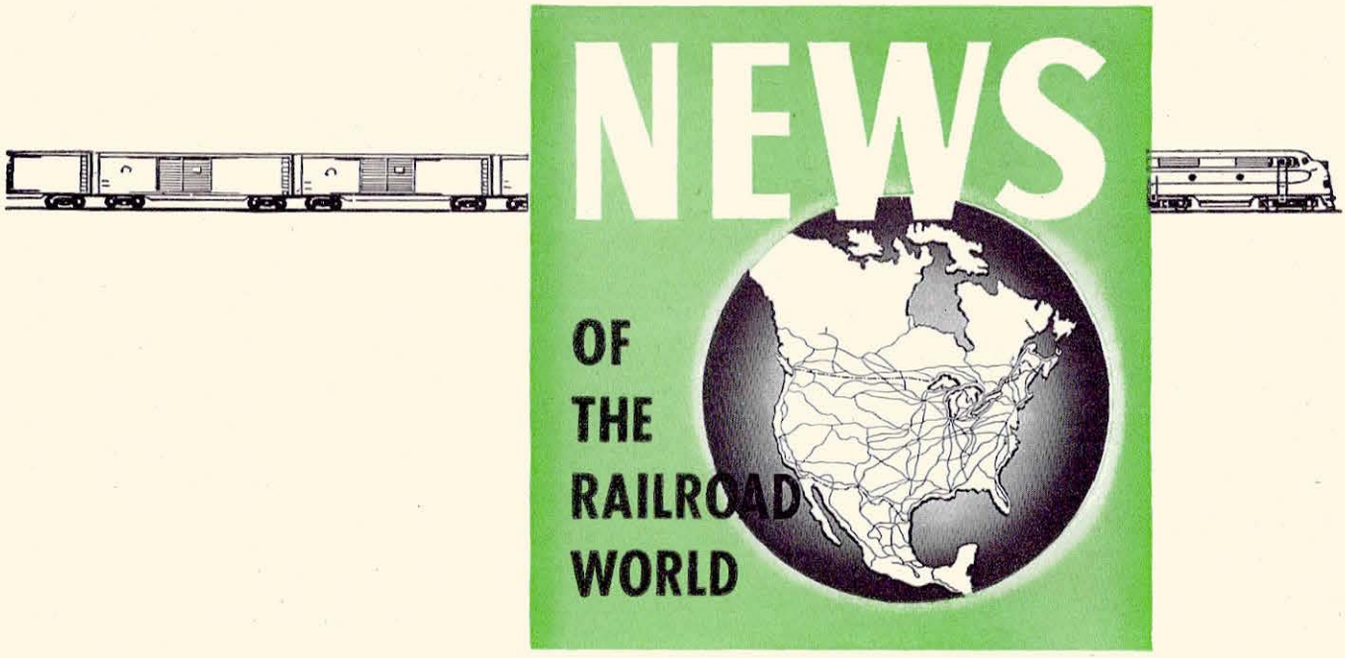
Hats off to the Rock Island—
for a hundred years and millions
of car miles of service. You've reached
your centennial by the progressive
route!

American Steel Foundries

Look for the MINT ○ MARK on these fine products...







"Non-Ops" Drop Union-Shop Talks With Western Roads; Southeastern Lines Won't Confer on Demand

The 17 non-operating unions involved in the union-shop case have broken off negotiations with the Western Carriers' Conference Committee, and they have been advised that southeastern railroads will not form a conference committee to discuss the union-shop demands.

These developments were revealed in statements issued October 3 and 4, respectively, by Daniel P. Loomis, chairman of the western committee, and by A. J. Bier, manager, Bureau of Information, Southeastern Railways. The eastern railroads are no longer involved in the case, their conference committee having signed a union-shop agreement with the "non-ops" on August 29 (*Railway Age*, September 8, page 11).

The Loomis statement of October 3 said union representatives had on that day broken off negotiations with representatives of the western carriers because the latter "reaffirmed their opposition to compelling employees to join unions." The statement went on to say that the western lines did offer to enter "union security agreements" patterned after that entered by the steel industry.

The steel agreement, reached after an eight-weeks' strike, provided that new employees be required to sign an application for union membership; but that, after 15 days and before expiration of 30 days, they may withdraw their application without losing their jobs. Non-members already on the job when the agreement was made were not required to join the union. Union members, however, must maintain their membership until within 15 days of expiration of the contract, after which they may withdraw from the union if they choose.

Along with the Loomis statement, the western committee made public a letter which Mr. Loomis sent on September 30 to G. E. Leighty, president of the Order of Railroad Telegraphers and chairman of the "non-op" negotiating committee. The letter reaffirmed an earlier statement of the western committee to the effect that the western roads would go no further than an agreement on the steel-industry pattern "or other possible forms of a union security agreement."

"The position of the western railroads," the statement said, "is that they are not willing to make an agreement which compels a man to join a union against his will in order to earn a living. We think such an agreement is repugnant to the principles upon which this country was founded and is an unjustified interference with the basic rights and liberties of the individual. We are willing to negotiate with respect to union security but we are not willing to agree to compel a man to join a union as the price of earning a living."

Amplifying this in his statement, Mr. Loomis insisted that the western roads "are not anti-union." He added that those roads think a "great many" of their employees agree with the managements' stand against compulsory unionism. On the matter of departing from management's practice in national cases, i.e., rejecting the emergency-board report which recommended the union shop, Mr. Loomis had this to say:

"We have accepted many recommendations that we regarded as grossly unfair and wholly unwarranted because we believed it our duty to uphold the Railway Labor Act as a means of preventing the interruption of railroad service by labor disputes. In the present case, however, we are not confronted with a matter of wages or working rules. We are faced with the demand that we bargain away to the leaders of these unions the rights and privileges of other free citizens—our employees. We do not feel that in good conscience we can do this."

Southeastern Statement

The October 4 statement issued by Mr. Bier of the southeastern roads' Bureau of Information was based on a letter he sent to Mr. Leighty on the previous day. Like Mr. Loomis, Mr. Bier defended the refusal to accept the emergency board's recommendations. The refusal to go along on the "compulsory union shop," he said, "cannot be regarded, in fairness, as deviating from the traditional acceptance by railroad managements of emergency board recommendations on matters of general application." In support of this contention, Mr. Bier argued as follows:

"The union shop issue is entirely unrelated to subject matters customarily considered by emergency boards and properly regarded as within their province. It has nothing to do with the conditions surrounding an employee's job, ordinarily the subject of negotiations between railroad managements and their employees. We do not believe it was ever contemplated that emergency

boards would consider a matter like the union shop proposal which would wipe out all of an employee's rights in his job, while having no relation whatever to the conditions surrounding his job."

Meanwhile, Mr. Bier's letter reminded Mr. Leighty that the southeastern roads have been opposed to the union-shop demand "from its inception," because they "oppose the principle of compulsory unionism." Their opposition "is to compulsion—not to unionism," and the fact that an emergency board recommended the union shop "does not lessen or alter such opposition," Mr. Bier, also said.

"Events since the recommendation was made," he added, "have discredited it—particularly as an expression of governmental policy. The Congress curtailed the authority of the Wage Stabilization Board because that board recommended a union shop in the steel case. In making such recommendation, we think the Wage Stabilization Board relied upon this recommendation of the railroad emergency board."

In closing, Mr. Bier told Mr. Leighty that "certain southeastern railroads" were willing to "undertake negotiations on union security but they are not willing to make any agreement which would force a man to join a union against his will to earn his living."

Knudson Predicts I. C. C. Will Change Its Rule to Speed Rate Decisions

Defense Transport Administrator James K. Knudson, who is also a member of the Interstate Commerce Commission, is on record with a prediction that the commission will amend its rules of practice to provide for expedited procedures in general-revenue cases.

The prediction was embodied in an October 3 address which he delivered at the annual meeting of the American Short Line Railroad Association in San Francisco. At the same time, he questioned the advisability of enacting legislation designed to accomplish the same result, i.e., legislation (like that sponsored unsuccessfully by railroads in the recent session of Congress), to authorize establishment of general rate increases on 30 days' notice, upon the carriers' certification of their need for additional revenue.

"Is it advisable," Mr. Knudson said, "to undertake the solution of a procedural question by legislation? I believe the question suggests its own answer. The procedural matters proposed to be remedied by legislation are matters which readily can and I believe will be covered by appropriate changes in the commission's rules of practice. Because a general revenue case was relatively rare prior to 1946, departures from normal procedures in handling them have thus far been governed by special rules issued by the commission in connection with each separate case. If these proceedings are to be so frequent as to require a continuing procedure rule or set of rules, we could—and I believe that we should—make appropriate amendments to our General Rules of Practice."

The D.T.A. administrator also discussed that agency's activities, calling upon the short lines to buy freight cars. "All lines," he said, "should regard the burden of car ownership as a joint responsibility, and each category should contribute its proper share on the order books to build up the over-all supply."

In other parts of his address, Mr. Knudson discussed I.C.C. budgetary problems, and contentions that an "overly restrictive policy" has been followed by the commission in cases involving motor operations by railroads and rail affiliates. The former discussion pointed up the impact of cuts in commission appropriations with this statement:

"It will mean that our motor carrier cases, to the tune of nearly fifteen hundred unheard proceedings, will gather dust in our files while awaiting their turns before our depleted force of examiners. It will mean continued delay in our rate cases; the cavalier scrutiny of tariffs, if any at all; a cursory instead of a thorough job in the essential task of locomotive inspection; and virtually no activity whatever with respect to motor carrier safety."

As to commission policy with respect to motor operations of the railroads, Mr. Knudson advised the short-line representatives that, where the ends of the national transportation policy would be met by proposed motor operations, applicant railroads may invoke that policy. He also suggested short-line divisions of joint rates might be due for adjustments. He then added:

"Whether the last best hope lies in attempted recourse to motor operations, a campaign of bargaining for greater divisions, or in some other formula, the short line has played a vital role in developing our national economy and is entitled to our solicitude."

Scott Outlines Commerce Department's Program of Transportation Research

Jack Garrett Scott, Under Secretary of Commerce for Transportation, made public on October 7 the outline of his office's tentative program of "study-research and action."

The program, which he called a "long-range" project, was approved by Mr. Scott after consultation with other agencies of the government and the Commerce Department's Transportation Council. The council is an advisory group organized last spring under the chairmanship of P. A. Hollar, vice-president of the American Car & Foundry Co. Its membership includes railroad executives, representatives of other forms of transportation and other interested parties.

Mr. Scott said it was intended that the studies to be conducted would produce a "sound and substantial factual basis" for recommendations by the Secretary of Commerce for "proposed legislative and administrative action."

Such recommendations, Mr. Scott added, would be directed toward accomplishment of seven "primary objectives," including imposition of charges for use of transport facilities provided by the government—"but only when and to the extent that such charges are fair and equitable, are clearly justified by all the facts and circumstances, and are consistent with national transportation policy." That is the sixth of the seven "primary objectives," the others being:

1. Establishment and maintenance of a privately owned, financially healthy and well coordinated transportation system, which is efficiently and economically operated, at the lowest reasonable total economic cost to the general taxpayers and transportation users.

2. Assurance of the provision of efficient modern transportation facilities and services, which will be adequate for the needs of commerce and defense, at just and reasonable rates, and without undue or unreasonable discrimination.

3. Recognition and preservation of the inherent advantages of the various types of transportation, and prevention of unreasonable discriminatory practices as between them.

4. Limitation of transport regulation to the degree clearly required by the public interest and to that which is administratively manageable, consistent with sound managerial discretion of the carriers.

5. Limitation of governmental assistance to transportation to those situations wherein such assistance is clearly justified by national transportation policy and requirements and is consistent with the general state of the nation's economy and the public budget.

6. Retention by the states of their primary powers in the transportation field which can be more effectively and efficiently exercised by them than by the federal government and which do not constitute undue burdens upon or obstructions to interstate or foreign commerce and do not conflict with the exercise by the federal government of its paramount authority over such commerce.

The outline of the program was set out in Mr. Scott's statement as follows:

1. Transportation research program of the various federal agencies.
2. Transportation as a factor in production, distribution, industry location, international trade, and defense.

Preliminary Considerations

I. Government Promotional Activities.
- A. Identification of Government Assistance.
  - 1. Definition of Promotional Activities.
  - 2. Government agencies, transport agencies and users involved.
  - 3. Government assistance by form of transport and type of assistance.
    - a. Purpose of stated need and justification for government assistance
    - b. Nature and extent of government aid
      - (1) Type and method of assistance or facilities provided (including federal government operations)
      - (2) Amount (cost) and location
      - (3) Public or private jurisdiction and ownership
    - c. The organization and administration of government aid
      - (1) The administrative responsibility and organization
      - (2) The relation between government agencies
      - (3) Financing of Federal assistance
      - (4) Standards and criteria applied in determination of type, priority and amount of assistance
  - 4. Relative use and volume of traffic on transport facilities.
    - a. Scope of transport facilities and services including those privately owned and operated
    - b. Use of facilities receiving aid
    - c. Use of facilities not receiving aid or minor amount
  - 5. Proposed legislative, executive and administrative actions affecting federal aid activities.
- B. Critical analysis and evaluation of techniques and standards applied in providing government assistance.
  - 1. Conclusions and recommendations
- C. Desirability of coordination of promotional activities of federal agencies.
  - 1. Problems of administration, ganization, and federal, state and local jurisdiction
  - 2. Conclusions; recommendations
- D. Benefits or detriments resulting or to result from government assistance to transportation
  - 1. In the general public interest including defense considerations
  - 2. To transportation users
  - 3. To transportation industry
  - 4. Conclusions
- E. Benefits in relation to costs of furnishing assistance
  - 1. Problems of cost allocation
  - 2. Effect on transportation users
  - 3. Effect on interagency competition
  - 4. Effect on public (private) investment in transportation industry
  - 5. Effect on federal expenditures and budget
  - 6. Safety considerations
- F. Effect of variation in government policy with respect to promotion or non-promotion of particular and different types of carriers
  - 1. Effect on carrier competitive relationships (regulated and unregulated)
  - 2. Effect on transportation user
- G. Desirability, extent and method of user payment for government assistance.
  - 1. Identification
    - a. Present extent or absence of user charges by form of transport
    - b. Justification, bases and methods of payment
    - c. Distribution or application of payments
  - 2. Effect on provision of transportation services
  - 3. Effect on interagency competition
  - 4. Effect on promotional policies
  - 5. Effect on regulatory policies
  - 6. Determination of user charge policy and principles
  - 7. Desirability of extension or modification of user charges
    - a. Basis and method of application
    - b. Effect on provision of transportation services
    - c. Effect on transportation users
    - d. Effect on carrier competition
    - e. Effect on promotional policies
    - f. Effect on regulatory policies

II. Government (Federal) Regulatory activities
- A. Nature and scope of regulation
  - 1. The federal agencies, transport agencies and users involved
  - 2. Evaluation of regulatory policies generally — quasi-judicial and quasi-legislative
    - a. Objectives and requirements for
    - b. Extent and nature as between modes of transport—inherent advantages
    - c. Exempt and unregulated or partially regulated operations —private carriers
    - d. Effectiveness or inadequacies of regulatory methods and procedures
    - e. Effect on competitive relationships (carrier and user)
    - f. Effect on regulated carriers as against unregulated carriers
    - g. The problem of "integration"
    - h. Conclusions and recommendations
  - 3. Evaluation of service, rate and safety regulations
    - a. Service
      - (1) Standards for entry, scope, and withdrawal of service and facilities
      - (2) Maintenance of marginal services
      - (3) Service obligation and compliance
      - (4) Effect on competitive relationships
      - (5) Conclusion and recommendations
    - b. Rates (and costs)
      - (1) Standards, controls and their administration
      - (2) Effect on competitive relationships
      - (3) The desirability of through routes and joint rates
      - (4) Effect on regional development and industry location
      - (5) Conclusions and recommendations
- B. Safety
  - 1. Extent of federal regulation

TRAIN HEATING PROBLEMS were discussed in this all-day meeting held in Chicago on September 18 under sponsorship of the Vapor Heating Corporation. The group included 137 mechanical department supervisory officers from 53 different U.S., Canadian and Alaskan railroads, plus some 60 representatives of firms in the railway supply industry. Discussion also touched upon use of steam generators to furnish steam and heat for railroad shops and other buildings. L. H. Gillick, sales manager of Vapor Heating, presided over the meeting, which was held following conclusion of the Coordinated Mechanical Associations conventions.

2. Effectiveness
3. State vs federal regulation
4. Conclusions and recommendations

C. Investigation of advantages and disadvantages of unification of regulatory functions of federal agencies
1. Lack of coordination of domestic and international surface and air transport regulation
2. Carrier versus functional organization
3. Problems of federal, state and local jurisdiction
a. Passenger train operations
b. Motor carrier rates
4. Suggested plan

III. Coordination and Consistency between Promotional and Regulatory Activities
A. Effect of promotional policies on regulation
1. On entry and expansion of services and utilization of facilities
2. On competition between carriers and allocation of traffic
3. Question of relative economy and fitness
4. On transportation users
5. Effect of extension or modification of user charges
6. Effect on national versus regional and local interests
7. Conclusions and recommendations

B. Effect of regulatory policies on promotional programs
1. On entry, expansion or abandonment of services
2. Effect of rate policies on competition between carriers
3. On transportation user
4. Effect of extension or modification of user charges
5. Effect on national, regional and local interests
6. Conclusions and recommendations

C. Effect of variation in government policy with respect to promotion or non-promotion of particular and different types of transport and relative freedom allowed certain portions of particular forms of transport.

D. Conclusions and recommendations

IV. Special and Other Problems
A. Relation of wage and rate determinations
B. Transportation excise tax
C. Economics of long-distance operations
1. Terminal costs
2. Line-haul costs
3. Service requirements and efficiency
4. Conclusions

D. The small shipment and merchandise traffic problem
E. The railroad passenger deficit problem
F. The commodities clause
G. The desirability of repeal of Section 22 of the Interstate Commerce Act.

Chevrier Optimistic On Seaway Development

In his first public pronouncement since the United States Senate, on June 18, rejected a resolution to approve a Canada-United States agreement on the St. Lawrence Seaway, Lionel Chevrier, Canada's Minister of Transport, said at Montreal in a recent address that "very considerable progress has been made which augurs well for the future" of both power and navigation development.

"It cannot be said," he declared, that "the last obstacle in realization of this project has been surmounted" but that if the International Joint Commission gives approval to the separate submissions from the Canadian and United States governments on power development, it would "enable the essential hydroelectric development to proceed without delay." He added that given assurance of this development, "Canada would construct the navigation canals."

In an address delivered to the Richelieu Club, Mr. Chevrier indicated that "one of the greatest benefits" which completion of the project would bring to the province of Quebec would "be the stimulus it will give to iron ore development in the Ungava district." He also thought many Quebec ports, including Montreal, Quebec, Sorel, Three Rivers, Seven Islands and others, "stand to gain from their position on a new and expanding avenue of commerce."

Mr. Chevrier predicted that Montreal would be called upon to handle "so much additional cargo" as to require "a very substantial expansion of harbor facilities," and announced that the National Harbours Board is planning expansions for Montreal to cost $7,300,000 in the next two or three years. Consideration would also have to be given to addition of another 5,000,000 bushels of elevator storage capacity in the near future, he said, and "in further anticipation of the seaway opening, it is apparent that new unloading berths will be required to handle large bulk carriers in place of the present canallers."

Waybill Studies

Additional waybill studies issued by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, include the following:

Statement No. 5230, State-to-State Distribution of Products of Agriculture, Traffic and Revenue—Terminations in the year 1951.

Statement No. 5232, State-to-State Distribution of Products of Mines, Traffic and Revenue—Terminations in the year 1951.

Statement No. 5233, State-to-State Distribution of Products of Forests, Traffic and Revenue—Terminations in the year 1951.

Statement No. 5235, Traffic and Revenue Progressions by Specified Mileage Blocks for Commodity Groups and Classes—Terminations in 1951.

Amortization Certificates

Certificates of necessity for accelerated tax amortization of facilities were granted to seven railroads during the period from September 4 through September 10, the Defense Production Administration has announced.

Roads receiving the fast write-off certificates are listed below, together with the amounts approved by D.P.A. and the percentages of those amounts which can be written off in five years.

Arkansas & Louisiana Missouri, $105,383—55 per cent.

Bessemer & Lake Erie, $6,467,500—55 per cent, and $1,735,200—40 per cent.

Chicago & Eastern Illinois, $330,000—50 per cent.

Chicago & Illinois Western, $47,257—40 per cent.

Southern, $68,063—40 per cent.

Texas & New Orleans, $130,401—70 per cent.

Western Maryland, $814,900—40 per cent.

In its report for the period from September 11 through September 17, D.P.A. showed that certificates then approved included those listed below:

Alabama Great Southern, $37,000—50 per cent.

Kansas City Southern, $32,744—40 per cent.

Oregon Short Line, $4,079,268—50 per cent, and $1,193,045—40 per cent.

Pennsylvania, $44,838—40 per cent.

Southern, $38,200—40 per cent.

Texas & New Orleans, $69,534—40 per cent.

RAILWAY EXPRESS AGENCY employees at completion of a course in supervisory development held recently in New York City. Primary objective of the program is to promote development of supervisory personnel in the agency's express terminals. Those who first complete it become instructors and will conduct similar courses for terminal supervisory personnel. It is planned to operate the program on a continuing basis.

Union Pacific, $25,346—40 per cent.

In its report for the period from September 18 through September 24, D.P.A. showed that certificates then approved included the following:

Atlantic Coast Line, $80,255—50 per cent.

Central of Pennsylvania, $2,703,394—40 per cent.

Illinois Central, $131,353—40 per cent.

Louisville & Nashville, $80,255—50 per cent.

Minneapolis & St. Louis, $400,000—55 per cent.

New York Central, $244,000—40 per cent.

Norfolk & Western, $1,009,500—40 per cent.

Pennsylvania, $377,700—40 per cent.

Wabash, $2,059,271—55 per cent; $28,965—70 per cent; and $14,500—40 per cent.

Freight Car Loadings

Loadings of revenue freight in the week ended October 4 totaled 851,866 cars, the Association of American Railroads announced on October 9. This was a decrease of 10,119 cars, or 1.2 per cent, compared with the previous week; a decrease of 6,891 cars, or 0.8 per cent, compared with the corresponding week last year; and a decrease of 12,037 cars, or 1.4 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended September 27 totaled 862,061 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

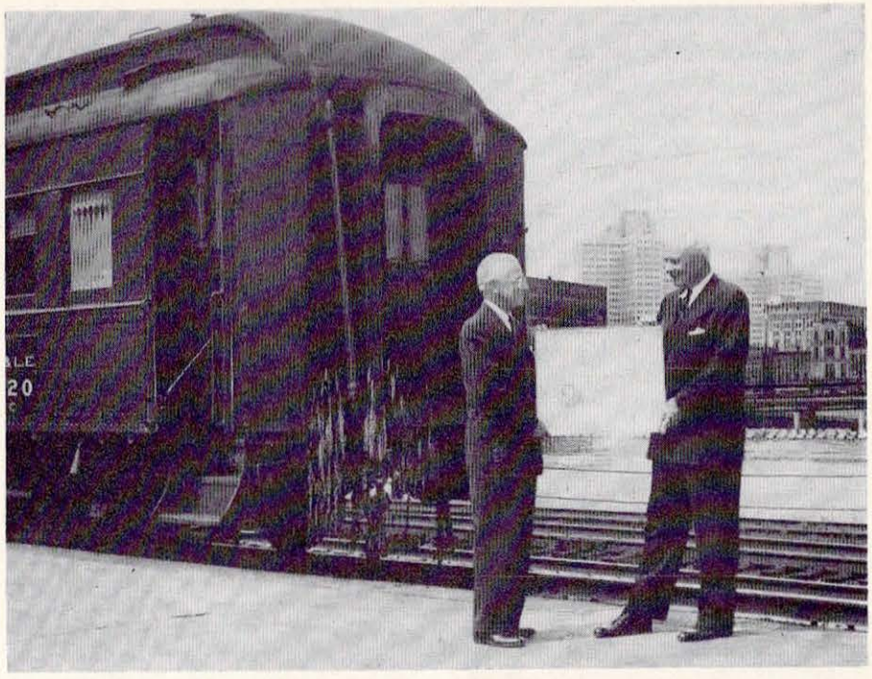
REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, September 27

District	1952	1951	1950
Eastern	141,025	143,814	151,709
Allegheny	168,927	175,595	176,590
Pocahontas	63,616	67,734	68,243
Southern	133,860	131,414	135,432
Northwestern	151,140	143,090	146,390
Central Western	135,512	137,391	136,044
Southwestern	67,981	65,537	65,778
Total Western Districts	354,633	346,018	348,212
Total All Roads	862,061	864,575	880,186
Commodities:			
Grain and grain products	50,872	51,330	51,297
Livestock	13,224	17,174	15,594
Coal	150,889	160,218	165,905
Coke	14,366	15,985	15,530
Forest products	44,096	45,593	50,056
Ore	98,002	82,200	79,398
Merchandise l.c.l.	76,383	76,949	90,121
Miscellaneous	414,229	415,126	412,285
September 27	862,061	864,575	880,186
September 20	873,559	863,690	870,529
September 13	881,218	850,812	866,658
September 6	746,044	732,769	751,449
August 30	727,344	829,481	851,841
Cumulative total 39 weeks	28,017,269	30,343,699	28,498,859

Canadian Roads Would Revise Export-Import Rates

Canadian railways are undertaking a general revision of rates on export and import traffic through eastern ports. The move is aimed at getting more revenue for the carriers by pegging Canadian rates to the higher export-import charges of United States railways. It would be the first general revision of the basis of these rates since 1905, though they have been subject to periodic increases.



THE FIFTIETH ANNIVERSARY of air conditioning was marked in Pittsburgh by presentation by Cloud Wampler, president of the Carrier Corporation, to C. M. Yohe, president of the Pittsburgh & Lake Erie, of a commemorative certificate. The presentation took place on the platform of the Pittsburgh terminal where Dr. Willis H. Carrier, inventor of air conditioning, is said to have conceived humidity control, a major principle of man-made weather, while waiting for a train. In the background are the buildings of the Gateway Center, said to be the largest commercial office building installation of air conditioning in the world.

The revision would include increases and decreases, but increases would heavily outnumber reductions and would be bigger. Increases would run to about 40 per cent and decreases to around 25 per cent.

The changes would apply on traffic through ports of Halifax, St. John, Montreal, Quebec, Sorel, Three Rivers, and the U. S. Atlantic seaboard, and would extend as far west as the Ontario-Manitoba border.

Railway officers have not yet estimated how much revenue they would get from the changes. However, the big bulk of Canada's overseas exports and imports—excluding western grain—moves on these rates.

One effect of the revision, if it is finally endorsed by the Board of Transport Commissioners, would be to cut down proportionately the size of any future general freight rate increase.

The board suggested last January that the railways might look into export-import rates—among other special tolls—for this purpose. The railways now have applied for repeal of the board's 1905 order setting up the existing basis, and the board has granted this, but will take into consideration representations from any interests that feel themselves injured by the proposed new scales.

The export-import proposal is one of a number being put forward by the railways in the search for more revenue outside general rate increases. Another major one is a basic overhaul of eastern Canada's so-called "Schedule A" rates which have not had a full revision since 1907 (*Railway Age*, August 11, page 78).

Safety Regulations For Motor Carriers

The 1952 revision of "Motor Carrier Safety Regulations" is now available through the Government Printing Office, the Interstate Commerce Commission advised recently. The 59-page booklet contains I.C.C. safety regulations applicable to motor common carriers, contract carriers, private carriers and so-called "exempt" carriers. Price of the booklet is 20 cents.

Bamberger Ends Rail Passenger Service

The era of interurban electric railway passenger service in Utah came to a close last month, when a two-car train of the Bamberger Railroad made a final run from Salt Lake City to Ogden.

A fire, which destroyed the car repair shops at North Salt Lake City last March (*Railway Age*, March 31, page 55), precluded further heavy repairs to rolling stock, and, as many parts for the cars were no longer available through suppliers, the road ultimately received approval from the Pub-

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended October 4 were announced by the Association of American Railroads on October 9 as follows:

	Surplus	Shortage
Plain Box	8	8,358
Auto Box	10	115
Total Box	18	8,473
Gondola	208	3,851
Hopper	9	3,078
Covered Hopper	0	245
Stock	101	180
Flat	8	329
Refrigerator	1,540	0
Other	760	43
Total	2,644	16,199

lic Service Commission of Utah to transfer all passenger service to buses of the subsidiary Bamberger Transportation Company.

The last run received widespread attention from the Utah press. President Julian M. Bamberger stated that freight service will continue to be handled by the road's diesel locomotives and that electrical equipment, trolley wire, poles, etc., will be removed from the right of way.

Chappell Heads C.B.R.E.

Aaron Mosher has resigned as president of the Canadian Brotherhood of Railway Employees, and Harry Chappell, of Winnipeg, has been elected new head of the organization, which has over 30,000 members, all in non-operating groups of railway employees in Canada.

Mr. Mosher had held his post for 44 years; he remains head of the Canadian Congress of Labor.

The new president of the C.B.R.E. has been its general representative in western Canada.

I.C.C. Study on Railroad Requirements Released

The Interstate Commerce Commission has issued, "as information," the study made by its Bureau of Transport Economics and Statistics on "Capacity and Capital Requirements of the Railroad Industry."

The study was reviewed in *Railway Age*, August 11, pages 54-56. It covers four classes of railroad facilities (freight cars, motive power, passenger-train cars and classification yards), and it discusses the expansion required for peak "preparedness" and for all-out war.

A notice from Acting Secretary George W. Laird of the I.C.C. said the bureau study was being distributed generally because "various groups, agencies and individuals . . . have expressed an interest . . . " The study was prepared as part of a research program in interindustry economics, sponsored by the Department of the Air Force. The commission has designated it as Statement No. 5227. It carries a disclaimer to the effect that the statement "has not been considered or adopted" by the commission.

B&O Launches Supervisory Development Program

A newly organized "supervisory development program," designed to teach men how to be "better bosses," was inaugurated by the Baltimore & Ohio on September 22.

The first phase of training under the program is a course in "human relations," based on guided discussions and designed to teach supervisors how to handle people. Instruction in the course will occupy five full days, during which participants will be relieved of all other duties. Each study group will contain only 12 officers, to insure each member a full opportunity to take part in the discussions, but classes will be so timed and placed as to reach hundreds of operating supervisors on all levels throughout the entire B&O system.

Fourth Quarter Loadings Seen 1.4 Per Cent Higher

Freight car loadings in the fourth quarter of 1952 are expected to be 1.4 per cent above those in the same period of 1951, according to estimates of the 13 regional Shippers Advisory Boards.

On the basis of those estimates, loadings of the 32 principal commodity groups will be 8,129,875 cars in the fourth quarter of 1952, compared with 8,015,328 actual loadings for the same commodities in the corresponding period of last year. Ten boards estimated an increase and three a decrease in loadings for the year's fourth quarter compared with the like 1951 period.

The tabulation shows actual loadings for each district in the fourth quarter of 1951, estimated car loadings for the fourth quarter of 1952, and percentage of change.

Shippers Advisory Board	Actual Loadings, Fourth Quarter 1951	Estimated Loadings, Fourth Quarter 1952	Per Cent Increase
Atlantic States	833,953	848,174	1.8
New England	115,154	111,979	2.8 dec.
Allegheny	1,035,672	1,018,835	1.6 dec.
Ohio Valley	1,050,573	1,016,952	3.2 dec.
Southeast	1,008,428	1,047,229	3.8
Great Lakes	53,916	572,989	7.3
Central Western	322,834	335,329	3.9
Midwest	897,366	920,297	2.6
Northwest	590,601	599,534	1.5
Trans-Missouri-Kansas	413,167	420,719	1.8
Southwest	563,321	569,032	1.01
Pacific Coast	377,817	391,098	3.5
Pacific Southwest	273,084	277,708	1.7
TOTALS	8,015,328	8,129,875	1.4

The boards expect an increase in the loading of 21 of the commodities listed and a decrease in 11. Commodities for which increases are estimated, and the amount of increase, include: Ore and concentrates, 12.1 per cent; hay, straw and alfalfa, 10.7 per cent; potatoes, 10.6 per cent; vehicle parts, 9.5 per cent; live stock, 7.7 per cent; fresh fruits other than citrus fruits, 5.3 per cent; food products in cans and packages, 4.4 per cent; sugar, syrup and molasses, 4 per cent; chemicals and explosives, 3.1 per cent; and iron and steel, 2.9 per cent.

Commodities for which decreases are estimated include: Cotton seed, soybean-vegetable cake and meal, excluding oil, 12.4 per cent; agricultural implements and vehicles, other than automobiles, 4.7 per cent; poultry and dairy products, 3.1 per cent; paper, paper board and prepared roofing, 3 per cent; automobiles and trucks, 2.4 per cent; citrus fruits, 1.8 per cent; coal and coke, 1.8 per cent; and lumber and forest products, 1.7 per cent.

PRR Assigns Special Service Supervisors

The Pennsylvania, moving toward further refinement in service to passengers on principal through trains, has assigned special supervisors of service to give personal attention to every phase of the operation and performance of trains for which each is individually responsible, according to Fred Carpi, traffic vice-president. This innovation centers in one man the responsibility for enhancing the attractiveness of service, as the new supervisors coordinate the duties of the many men and women who prepare, operate and serve on the trains, Mr. Carpi explained.

"The new supervisors give close personal attention to service to the passenger from the moment he approaches the ticket window until a Red Cap deposits his luggage in a taxi at destination," he said. "Their duties include getting acquainted with passengers on trains, obtaining suggestions for improving service, and determining whether additional refinements might be made."

Each supervisor is responsible for trains on a single run, such as the two "Broadway Limited" trains between New York and Chicago. He observes and reports on preparation of cars in yards, adequacy of train announcements, "red cap" and train gate services, and other details. Riding their runs at least twice each week, the supervisors work with the train, Pullman and dining car crews in observing the handling of the train by engine crews, housekeeping en route, temperature control in cars, adequacy of accommodations, and the like, Mr. Carpi said. On days when they do not ride, the supervisors see off and meet their trains, check cars and discuss performance with the crews.

In addition to the "Broadway Limited," the new program covers the "Cincinnati Limited" (New York-Cincinnati), "Red Arrow" (Detroit-New York-Washington), "Liberty Limited" (Chicago-Washington), "General-Trail Blazer" (New York-Chicago), "Spirit of St.

Louis" (New York - Washington - St. Louis), and the "Pittsburgher" (New York-Pittsburgh). It is planned to expand the program to other trains.

Through train operation involves several changes of operating crews en route, while Pullman and dining car crews run through, Mr. Carpi explained. "The trains operate over numerous divisions and must be serviced on alternate days in yards hundreds of miles apart," he said. "The coordination of the supervisors of service is proving to be most helpful in rounding out our regular operating and traffic program covering the servicing of these trains." He added that the Pennsylvania has inaugurated a broad employee relations program to obtain better understanding of mutual interests among the men, their supervisors and company officers, so that each employee will be better able to serve the public.

Net Income for 1952 Totals $405 Million

Class I railroads in the first eight months this year had an estimated net income, after interest and rentals, of $405,000,000, according to the Bureau of Railway Economics of the Association of American Railroads.

The 1952 figure compares with net income of $339,000,000 for the first eight months last year. Net railway operating income in the eight-month period this year totaled $611,327,838, compared with $527,579,745 in the eight months of 1951.

Estimated results for August 1952 showed net income of $79,000,000, compared with $58,000,000 in August 1951. The August 1952 net railway operating income was $104,939,433. During the same month last year net railway operating income totaled $82,687,205.

In the 12 months ended with August, the rate of return averaged 4.08 per cent, compared with 3.96 per cent for the 12 months ended with August 1951.

Gross in the first eight months of 1952 amounted to $6,810,999,610, an increase of 0.7 per cent over the 1951 period, when gross amounted to $6,764,406,068. Operating expenses in the 1952 period were $5,298,347,702, compared with $5,345,357,749, a decrease of 0.9 per cent.

Twenty-three Class I roads failed to earn interest and rentals in the first eight months of 1952, according to the A.A.R. report.

CLASS I RAILROADS—UNITED STATES

	1952	1951
	Month of August	
Total operating revenues	$899,733,630	$910,170,837
Total operating expenses	663,359,720	698,423,131
Operating ratio—percent	73.73	76.74
Taxes	113,780,148	111,257,447
Net railway operating income (Earnings before charges)	104,939,433	82,687,205
Net income, after charges (estimated)	79,000,000	58,000,000
	Eight months ended August 31	
Total operating revenues	$6,810,999,610	$6,764,406,068
Total operating expenses	5,298,347,702	5,345,357,749
Operating ratio percent	77.79	79.02
Taxes	782,437,887	754,296,780
Net railway operating income (Earnings before charges)	611,327,838	527,579,745
Net income, after charges (estimated)	405,000,000	339,000,000

December 15 Is Deadline For Rail Congress Papers

A closing date of December 15, 1952, has been set for the submission of railroad technical papers to be presented at the Eighth Pan American Railway Congress to be held in Washington, D. C., and Atlantic City, N. J., next June, the organizing committee of the congress has announced.

An Eric V. Hauser Memorial Award of $1,000 has been offered for the paper most helpful to the science of railroading in respect to way and structures; the Argentine Government has offered three prizes totaling 50,000 pesos (about $3,600) for papers on railroad planning and coordination, railroad operation, and social and working conditions of personnel, and the Pan American Railway Congress has established an award of 25,000 pesos (about $1,800) and a gold medal for the paper of most benefit to railroad operation and economy.

Papers prepared by residents of the United States should be submitted in triplicate to Dr. Lewis K. Sillcox, vice-chairman of the board of the New York Air Brake Company at Watertown, N.Y.

Truman "Whistle-Stop" Talk Assails RR "Lobby"

President Truman recently listed the "railroad lobby" among "special interests" that are "out to get me and destroy all I have done."

He made this statement in the prepared text of a "whistle-stop" speech which he delivered September 29 at Fargo, N. D. On the "railroad lobby," the President also had this comment:

"Then there's the railroad lobby that's been jacking up your freight rates in North Dakota—and fighting tooth and nail against the St. Lawrence seaway so you can't get freight rates down."

Chicago Plan Group Backs Dearborn Station Removal

The recent proposal to remove Chicago's Dearborn station from its present site to one adjacent to trackage of the Grand Central and La Salle Street stations (*Railway Age*, July 7, page 13), has now been approved by the Chicago Plan Commission.

The scheme was originally advanced by Earl B. Anderson, engineer for the Chicago city council's committee on terminals. The plan commission now has termed it "the most positive step taken in the 40 years that the problem has been under consideration."

But L. A. Evans, vice-president and general manager of the Chicago & Western Indiana, which owns the passenger terminal, said the proposal was "substantially the same" as one carefully considered by the Chicago South Side Railway Terminal Committee several years ago, which was discarded "because of limitations of practicability and costs which would far exceed benefits." "That is still our opinion," he added.

"Railroad President" Urges Better Highways

Speaking in a "dual" capacity as president of the bankrupt Wisconsin Central and president of his own trucking company, the American Transfer Company, of Baltimore, Abraham Watner told members of the Milwaukee Transportation Club on September 25 that "the railroads are biting their own hands by attempting to promote unreasonable highway limitations on trucks . . . As a railroader, I need trucks to haul goods to and from my terminals," he said.

Mr. Watner urged construction of better highways because "we have let the vehicles that use the highways improve faster than the highways themselves. We should make the highways as good as the trucks that ride them. We should build more and better roads —roads to fit the traffic." He also advocated terminating "unreasonable I.C.C. regulations that hamper railroads" and "unreasonable state limits on weight, length, etc., that hamper trucks."

Mr. Watner is one of a group of preferred WC stockholders who withdrew from the annual meeting in March 1951 and elected a full slate of corporate officers and six directors. But the railroad is operated by the Soo Line as agent for the receiver and trustee.

Joint Military Storage Plan Inaugurated at Philadelphia

The Defense Warehousemen's Association of Philadelphia has been organized to set up arrangements whereby commercial warehousemen there may participate in joint military storage contracts. This was announced on October 7 by the Defense Transport Administration which also said that similar associations are nearing completion for Chicago and New York.

At the same time, the Defense Production Administration issued a like announcement to say that its administrator, Henry H. Fowler, had approved the Philadelphia plan. "Under the Defense Production Act of 1950, such agreements are authorized when found to be in the public interest as contributing to the national defense," the D.P.A. statement explained. It went on to say that the Philadelphia agreement had also been approved by the

attorney general after consultation with the Federal Trade Commission.

The stated purpose of the plan is to provide the Department of Defense with arrangements whereby all commercial warehousemen within a major metropolitan area, qualified to handle general merchandise, can participate in a single joint contract for the storage of military supplies. Supplies assigned to the area for commercial storage will be distributed among members of the association in proportion to the amount of public storage space operated by each

Atlantic State Board Keeps L.C.L. Committee

The Atlantic States Shippers Advisory Board at its recent 88th regular meeting in Elmira, N.Y., voted to continue its L.C.L. Committee. It had been proposed at the board's meeting in Roanoke, Va., last spring (*Railway Age*, April 29, page 16), that the committee be discontinued on the grounds that railroads, by abolishing free pick-up and delivery service, increasing rates and permitting diversion of traffic to freight forwarders, showed "no interest" in offering satisfactory l.c.l. service.

Truckers' Rate Pact Conditionally Approved

Division 2 of the Interstate Commerce Commission has approved conditionally a rate-procedures agreement entered by some 390 common-carrier truckers which are members, "classification associates," or "concurring non-members" of the Eastern Motor Freight Conference of West Hartford, Conn.

The condition imposed by the division will require that the agreement be amended by striking from it a provision authorizing the conference to assail or seek the suspension of rates. Entry of an order approving the agreement was withheld until the applicants advise the commission that they have assented to the condition and revised the pact accordingly. The case is docketed as Section 5a Application No. 29.

In another case (Section 5a Application No. 25), Division 2 recently dismissed a similar application filed by more than 900 truckers proposing an agreement to be administered by the New England Motor Freight Bureau of Boston, Mass. The dismissal was "without prejudice" to the filing of a new agreement in conformity with findings made by the division. Such findings are to the effect that section 5a forbids approval of the agreement so long as freight forwarders were parties. They will require withdrawal of three forwarders which are not members of the bureau, but which sought to participate because they utilize the bureau's classification.

Tariff Study Group Sends Out 16th Questionnaire

The Railroads' Tariff Research Group has sent out the sixteenth of the series of questionnaires whereby it is seeking views of interested parties on ways and means of simplifying and otherwise improving tariffs.

Questionnaire No. 16 asks: Do you prefer loose-leaf or bound tariffs? Does your preference vary with types of tariffs?

The questionnaire's discussion recalls that the Research Group submitted similar questions to the membership of the National Industrial Traffic League in September 1951. Of the 816 replies received, 345 members favored the loose-leaf form and 471 preferred the bound tariff.

Noting that this poll surveyed shippers only, the discussion went on to point out that the present questionnaire will be sent to tariff users in the traffic, accounting, and local station departments of railroads; to shippers; to freight forwarder stations; and to federal government departments.

Fowler Notes Low Output Of Locomotives and Cars

Freight cars and diesel-electric locomotives are being produced "at a lower than scheduled rate, due in part to an easing of demand," Defense Mobilizer Henry H. Fowler reported in the Seventh Quarterly Report by the Director of Defense Mobilization. The report was submitted to President Truman on October 6.

"Steps are being considered to bring the production of both freight cars and locomotives back up to the scheduled rate," Mr. Fowler said. The nature of these "steps" was unexplained.

Both the National Production Authority and Defense Transport Administration have expressed concern about the declining backlog of freight car orders. Officials at both agencies say that if freight car production reaches 11,000 cars a month, the order boards will be clean by the second quarter of next year. Presumably, these agencies may endeavor to bring about an increase in car orders.

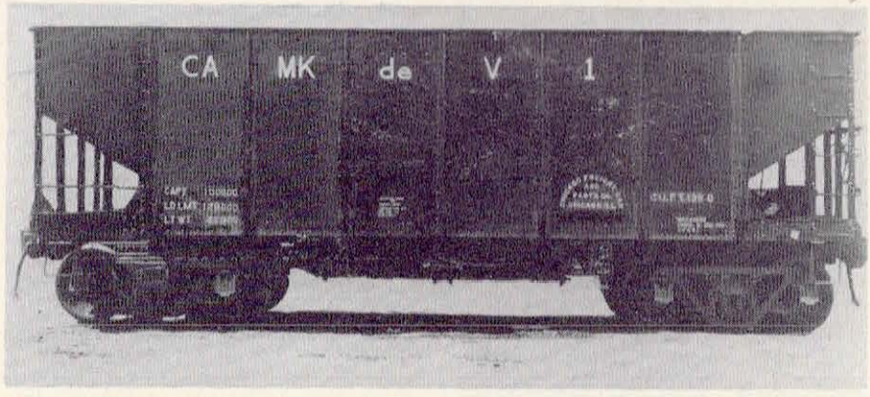
As noted in *Railway Age* of October 6, page 18, members of the Contract Car Builders Industry Advisory Committee recently reported to N.P.A. a "virtual standstill of new orders for freight cars." But the committee explained that railroads "are reluctant to place new orders when orders a year old still are undelivered."

Mr. Fowler's report to the President said freight car production, including refrigerators and tank cars, averaged 6,480 cars monthly for the six months ended with August 31. To meet the defense expansion goal, a monthly output of 11,000 cars is required, Mr. Fowler said.

Diesel-electric locomotive production was at the monthly level of 274 units, as compared with a level of 300 needed to meet the goal of 15,500 new units by the middle of 1954, Mr. Fowler added.

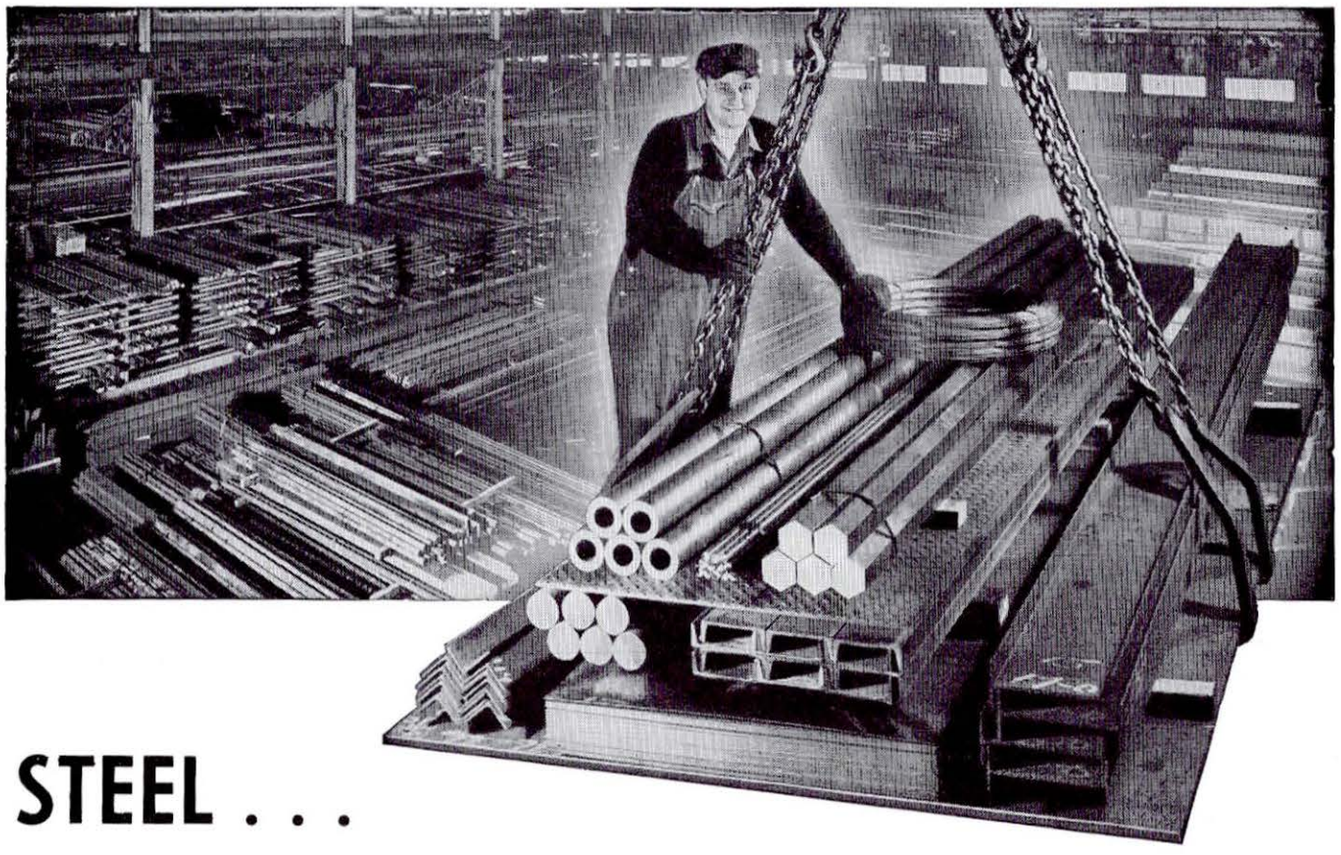
I.C.C. to Probe Jersey's Intrastate Commuter Fares

The Interstate Commerce Commission has instituted an investigation of intrastate commutation fares which railroads in New Jersey are required to maintain by orders of the Board of Public Utility Commissioners of that state. The investigation, which is docketed as No. 31107, was sought in a petition filed with the I.C.C. by the Central of New Jersey and New York & Long Branch.



FORTY BALLAST CARS have been shipped to Venezuela by the Chicago Freight Car & Parts Co. for use in development of the United States Steel Corporation's new iron-ore project, the Cerro Bolivar mine. Originally two-pocket hoppers in coal service, the cars were redesigned and rebuilt into selective-type ballast cars from which ballast can be distributed either to the sides or center of track in the exact quantities needed. Of the 40 cars shipped, 20 have been purchased by the Morrison-Knudsen Company of Venezuela for use in constructing the 90-mile railroad that will haul ore from the mine to the Orinoco river, where it will be transferred to barges. The other 20 cars have been purchased by the Orinoco Mining Company for use in maintaining the road after it is built.

An Anniversary Salute to Our Old Friend and Customer



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Shipped Quickly from Ryerson Stocks

Call Ryerson for the steel you need and you'll find we're always on the job.

Though a good many kinds and sizes are still in short supply, we carry a wide range of steel products in our 15 plants strategically located along the main lines of the nation from coast to coast. And every plant is set up to serve railroad shops promptly with high quality steel.

In addition, 110 years of steel service experience has given our organization a practical knowledge of railroad requirements that you many find helpful.

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CARBON STEEL BARS—Hot rolled and cold finished
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STAINLESS—Allegheny bars, plates, sheets, tubes, etc.
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Rock Island Marks Centennial With Continuing Program of Dieselization

A continuing program of dieselization keynotes the long-range planning of the Rock Island as it enters its second century of railroading this month.

Aided by a fleet of 95 ALCO-GE locomotives, this "railroad of planned progress" already has dieselized 85% of its operations. First to dieselize completely its suburban service into Chicago, the Rock Island selected ALCO-GE road switchers almost exclusively to handle this high-speed passenger service.

Whether in passenger or switching service, or heading up the crack ROCKET freights, economical ALCO-GE locomotives are helping the Rock Island to win more and more tonnage to the rails. 113-307

Alco GE

AMERICAN LOCOMOTIVE and GENERAL ELECTRIC

160
160
160
Rock
Island
RI
120

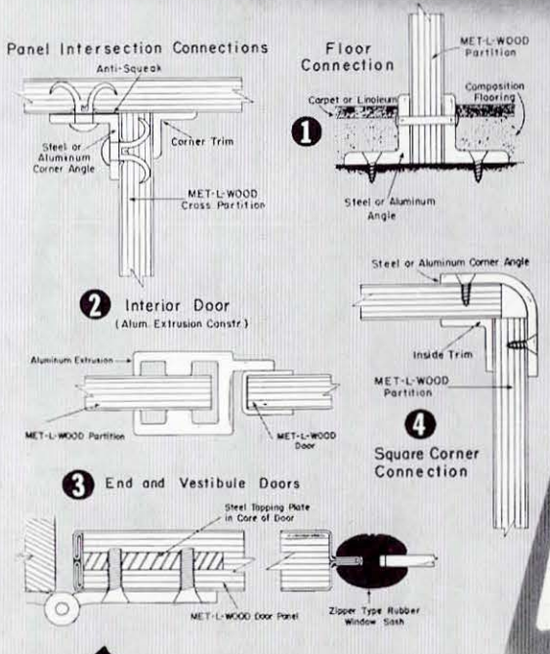
MET-L-WOOD
METAL BONDED TO PLYWOOD

VERSATILITY

FOR MODERN CAR INTERIORS

Met-L-Wood walls provide a smooth, luxurious finish in addition to saving weight and simplifying construction.

MET-L-WOOD passenger car partitions, doors and paneling not only produce beautiful finished surfaces, but can also save up to 73%* in weight and a substantial amount of construction time. Shown at left, and described below are typical Met-L-Wood construction details. Full information on Met-L-Wood versatility in new or rebuilt cars will be furnished promptly on request. Write today.



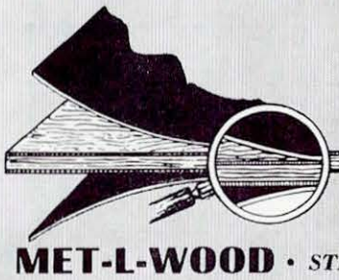
1 Panel intersections with Met-L-Wood can be made invisible from outside with the use of split rivets. Floor connections may be made in a variety of ways, one of which is shown here, using through-rivets and metal screws.

2 Interior doors of Met-L-Wood can be fitted with aluminum extrusion door stops; or the Met-L-Wood partition formed so that the door stop is an integral part of the panel.

3 Steel tapping plate inserts can be put in Met-L-Wood doors at proper places for solidly anchoring hinges and door-opening devices. Note simplicity of using zipper-type window sash with pre-formed Met-L-Wood window openings.

4 Square or rounded corners are made with Met-L-Wood panels and steel or aluminum corner forms. Corner forms can also be fastened with split rivets or through-rivets, as well as with wood or metal screws.

**Met-L-Wood panels 3/8" thick, with steel both sides, have a stiffness factor exceeding that of 1/4" solid steel plate, while weighing only 27% as much as steel!*



MET-L-WOOD CORPORATION

6755 West 65th Street, Chicago 38, Illinois

MET-L-WOOD • *STRONG... LIGHT... Smooth Finish... Sound Deadening... Fire-Resisting... Insulating*

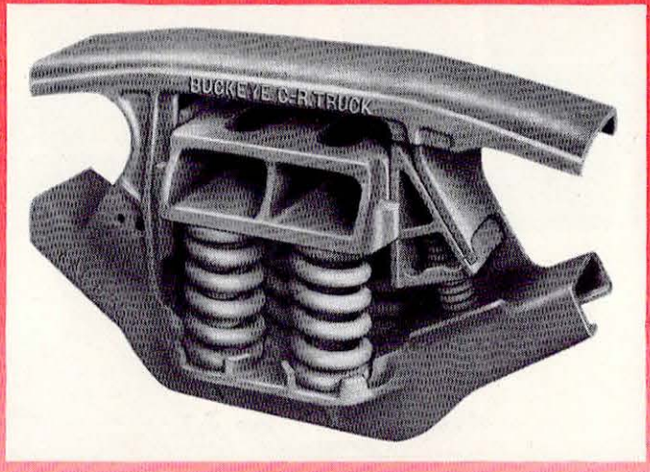
A MODERN FREIGHT CAR TRUCK

Combining Superior Riding Qualities and Long Service Life

THE BUCKEYE

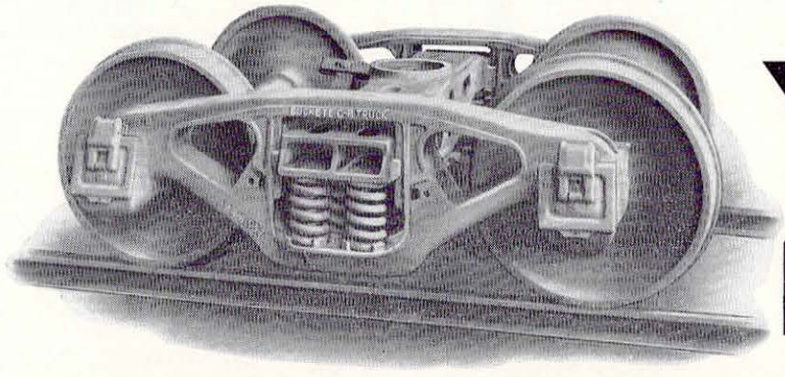
C-R

TRUCK



The Buckeye C-R (Cushion-Ride) Truck is designed to meet the requirements of all types of modern freight service. It includes the following features which provide superior riding qualities and long life:

- One side frame design of a given capacity is suitable for all AAR Standard or Alternate Standard coil springs with travels of 1-⅝", 2-½", 3-1/16", or 3-11/16".
- Full box section bolster end construction provides maximum strength and adaptability to various spring travels.
- Vertical and lateral control and self squaring action are independent of the load carried.
- Symmetrical friction wedges arranged in the side frame columns have full width bearing on both the bolster and side frame for reduced wear and long life.
- Low rate wedge springs minimize reduction of control due to wear.
- Friction parts are self cleaning to prevent accumulation of dirt in service.

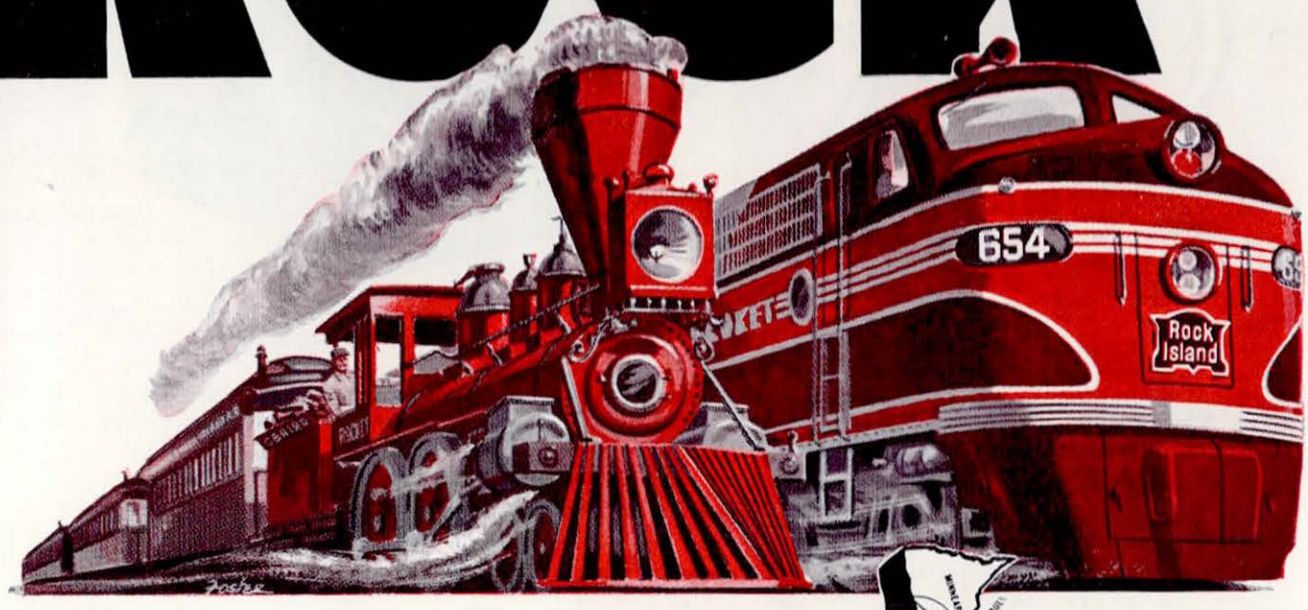


THE BUCKEYE STEEL CASTINGS COMPANY

New York, N. Y. Columbus, Ohio Chicago, Ill.

Your railroad... the

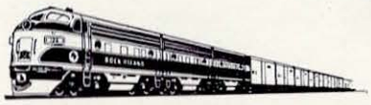
ROCK



Within this great area, directly served by Rock Island, are many desirable locations that you might find especially suitable for your operations. A complete department is maintained to help you with a selection. All inquiries will be held confidential.

Planned progress ON YOUR RAILROAD

Throughout the entire Rock Island System an aggressive policy of Planned Progress is constantly being pursued. To date that policy has produced many notable improvements, a few of which are listed here.



ROCKET FREIGHTS, diesel-powered, have advanced the movement of freight over the rails to nearly passenger train speeds. Total tonnage per train has been greatly increased, too, by these modern locomotives.

* * *

CENTRALIZED TRAFFIC CONTROL has multiplied the use of lines—making one track do the work of two, two tracks the work of four.

HUMP-RETARDER CLASSIFICATION YARDS cut hours—even days—from switching and train make-up time.

* * *

REDUCED CURVES AND SHORTENED LINES, improved roadbeds, and heavier rails, have greatly reduced the hours your freight shipments spend in transit.

ISLAND

celebrates its 100th anniversary October 10, 1952

Since that memorable day October 10th, 1852, when the first Rocket made its initial run from Chicago to Joliet, the Rock Island has spread its lines throughout the Midwest from the Great Lakes to the mountains and from Canada to the Gulf of Mexico, serving the Gulf Ports of Houston, Texas City and Galveston—40 miles of single track has expanded to 8000 miles of modern rail transportation, with 5000 miles of coordinated truck routes.

That growth has paralleled a tremendous development in the area directly served by Rock Island. Your Railroad is proud of the part it has played in that development—proud of its past and confident of its power to play an essential role in the continuing growth of the Midwest and America.

Today's Rocket-Smooth Riding

Every Rocket is diesel-powered and luxuriously equipped for the occasion, be it day or night travel—Observation Lounges, diners and snack cars for relaxation, refreshments, snacks and full-course meals (delicious food)—sleeping accommodations in a variety from private rooms to very comfortable reclining car seats.
Always ride a Rock Island Rocket—they're fast, safe, comfortable, carefree, relaxing.

The Famous Rocket Routes

ROCKY MOUNTAIN ROCKET—Chicago—Denver—Colorado Springs
CORN BELT ROCKET—Chicago—Omaha
DES MOINES ROCKET—Chicago—Des Moines
PEORIA ROCKET—Chicago—Peoria
TWIN STAR ROCKET—Minneapolis—St. Paul—Kansas City—Houston
ZEPHYR ROCKET—Minneapolis—St. Paul—St. Louis
TEXAS ROCKET—Kansas City—Fort Worth . . . And
The GOLDEN STATE—Chicago—Arizona—California with through cars from Minneapolis, St. Paul and St. Louis

Rock Island

A CENTURY OF SERVICE
1852 · The Road of Planned Progress · 1952

A marvel in 1852—even more so in 1952

23,000 L. C. L. PACKAGE CARS, sealed between transfer points, reduce loss and damage to a minimum.

IMPROVED TYPES and LARGE NUMBERS of new freight cars have been put in service—more are constantly being added for availability and utility.

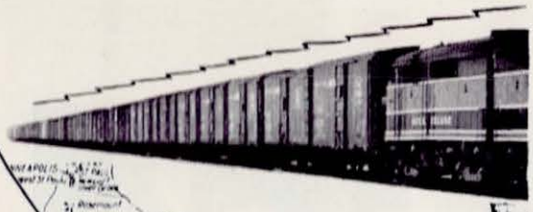
MANY SPECIFIC DEVELOPMENTS add to the over-all efficiency of Rock Island's freight service, such as The New $600,000.00 Freight House at Armourdale (greater Kansas City), the Denver Cut-off, and the testing laboratory in Chicago.

You can rely upon Rock Island to employ the latest improvements for perfect shipping.

For you... personally!

Competent men are available to help you with your individual shipping, travel or industrial problems. Just call any Rock Island Traffic Representative.

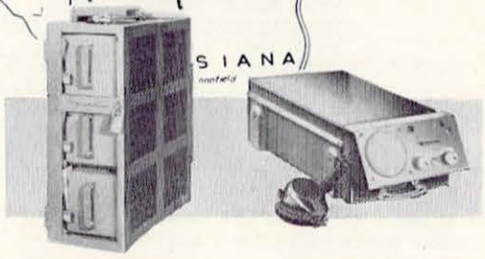
How Motorola 2-Way Radio BLANKETS THE ROCK ISLAND!



The "Route of Planned Progress" keeps moving ahead with Motorola radio

With rapidly increasing traffic in recent years, Rock Island turned to Motorola for improved communication. Today, the Rock Island has one of the finest railroad radio networks—a Motorola installation that puts end-to-end radio along 2500 miles of main line . . . blankets terminals with swift, certain contact . . . joins wayside stations, moving trains and dispatchers' offices for the fullest use of every piece of rolling stock.

A CENTURY OF SERVICE
1852 · Rock Island Lines · 1952



The "Universal"
With either horizontal or vertical racks to AAR specifications.

The "Uni-Channel"
Highly mobile and efficient 2-way dispatching radio for RR cab or auto mounting.

MORE THAN 50 AMERICAN RAILROADS ARE NOW USING

Instant Radio Contact Saves Time and Money Along Every Mile of Right-of-Way!

End-to-end contact in any weather keeps wheels turning—on schedule.

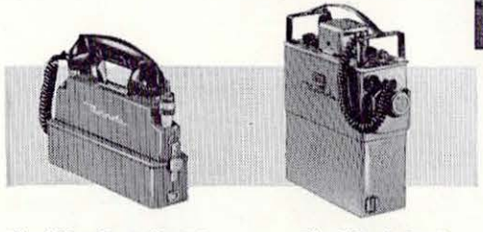
Motorola 2-way radio puts engineer and conductor in constant touch, regardless of visibility or terrain. On mountain curves, in tunnels, in good weather or bad, Motorola radio means safe and certain control of trains. End-to-end and train-to-train radio insures safer "meets", provides lightning contact in any emergency.

Yard-and-terminal contact speeds car-checking, controls switching

With Motorola radio, dispatchers can call every locomotive in the yards to expedite train make-up and direct operations. Car checkers have on-the-spot contact with yard clerks, report car movements immediately, save time in writing up waybills.

Motorola Radio is custom-tailored for your individual operations

Specially-engineered Motorola networks cover all railroad applications—yard-and-terminal, end-to-end, train-to-train, train-to-wayside, wayside-to-wayside and car-checking. Your local Motorola engineer will gladly show you how Motorola radio can save time and money along your right-of-way—write today for full information.



The "Handie-Talkie"®
Self-contained 2-way radio for caboose or portable service anywhere a man can go.

The "Pack Set"
Rugged back-carry portable with heavy-duty battery for longer operation.

Motorola®

Specialists AND WORLD LEADERS IN 2-WAY RAILROAD RADIO

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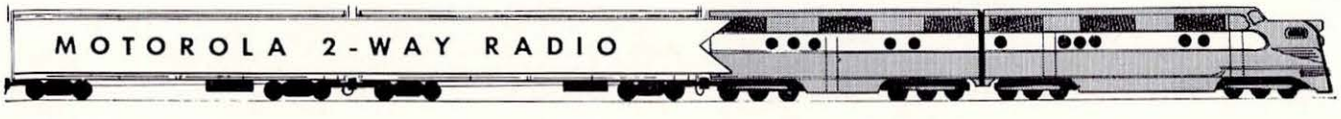
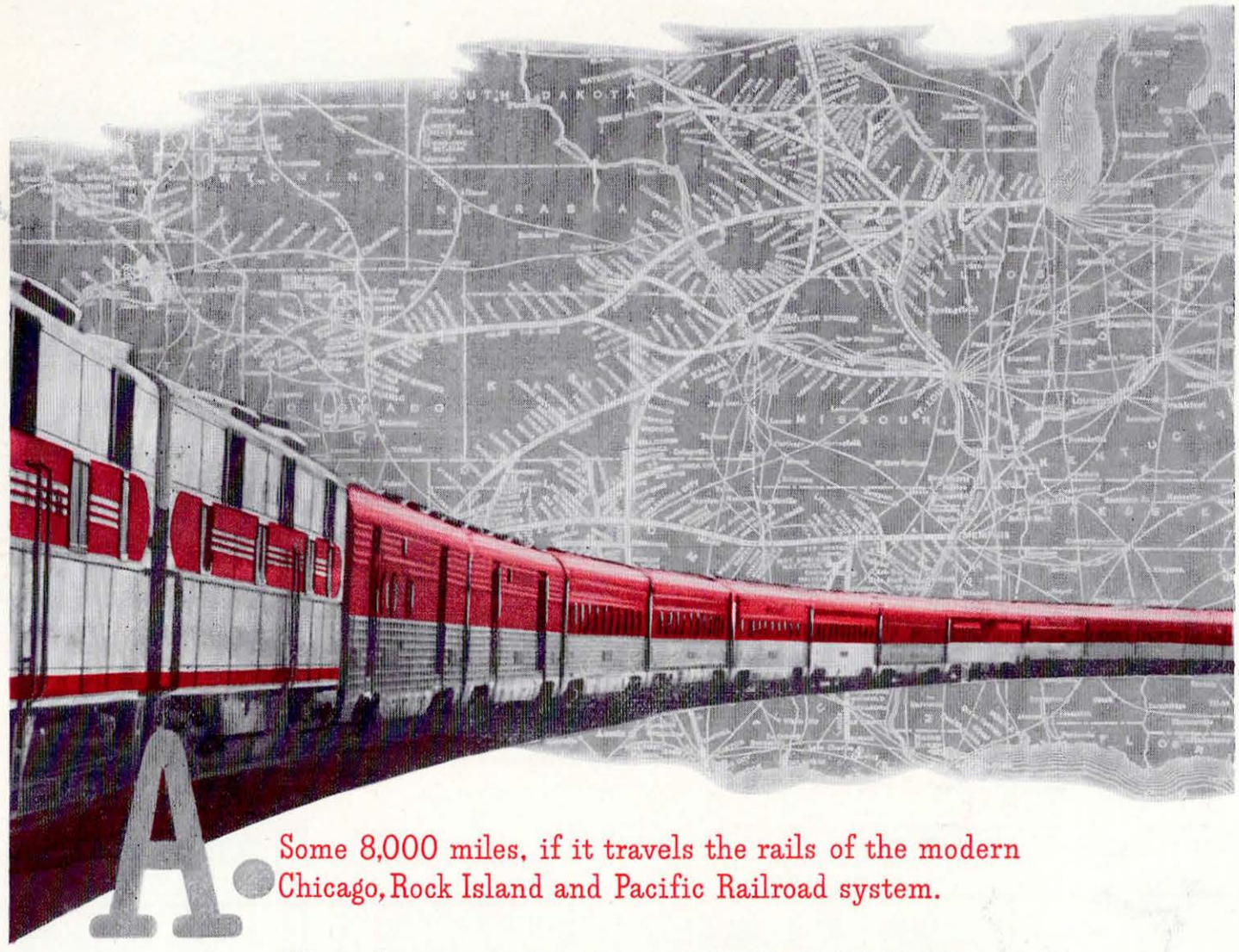


Q. How far could you

ORIGINAL ROCK ISLAND "ROCKET"—1852

ride a ROCKET...?



A. Some 8,000 miles, if it travels the rails of the modern Chicago, Rock Island and Pacific Railroad system.

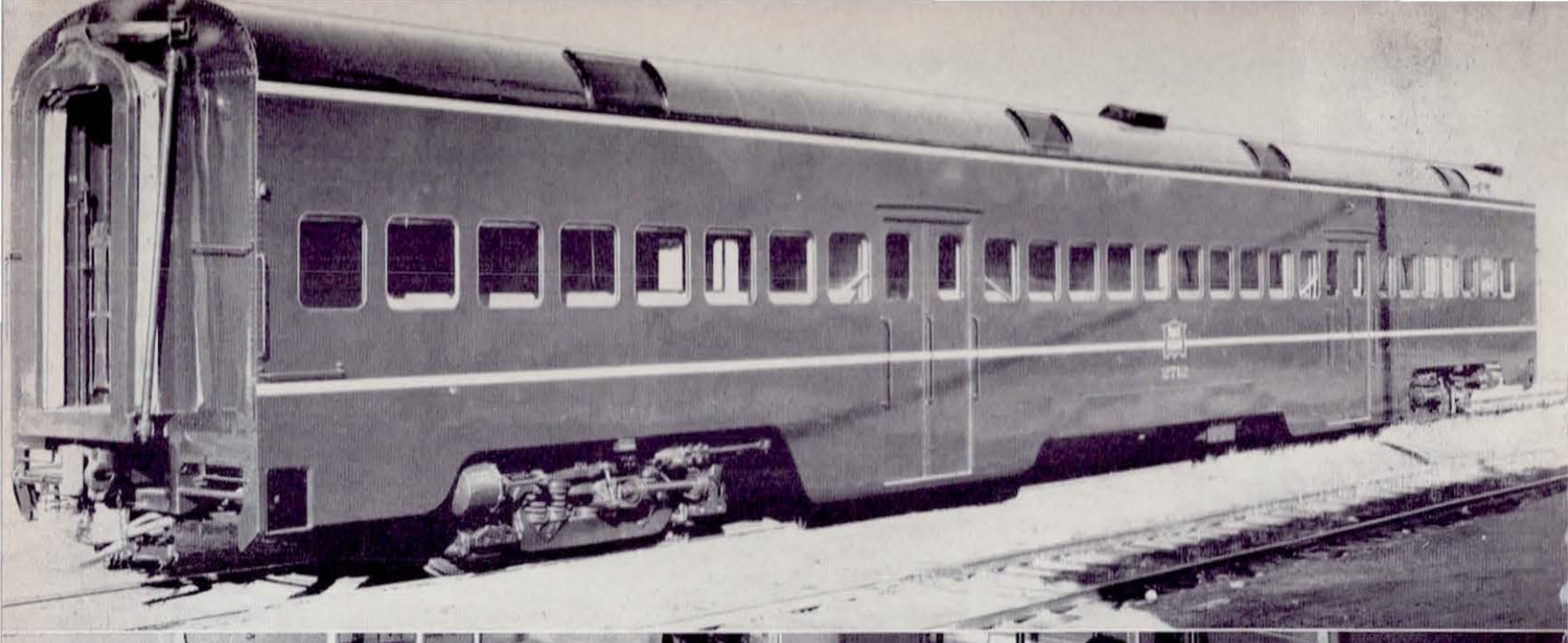
100 years has seen a vast change between today's Rocket, with its giant Diesel-electric locomotive and that first wood-burning Rocket which proudly chugged 40 miles from Chicago to Joliet. As the Rock Island grew, the midwest empire followed. As trains grew longer, locomotives grew larger — and proper lubrication became more important. Sinclair has kept pace with the problems of railroad lubrication . . . and Sinclair GASCON® OILS are used on many of the modern Rockets.

Today, more than 80 U. S. railroads prefer Sinclair GASCON OILS. Only a tried, tested and outstanding oil could make and *keep* a record such as this.

SINCLAIR RAILROAD LUBRICANTS

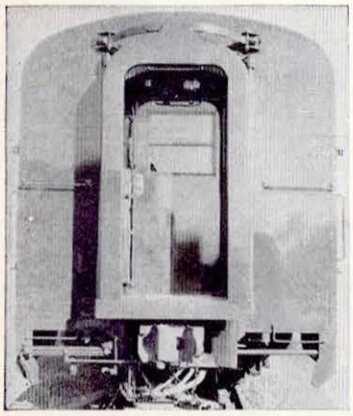
SINCLAIR REFINING COMPANY, RAILWAY SALES

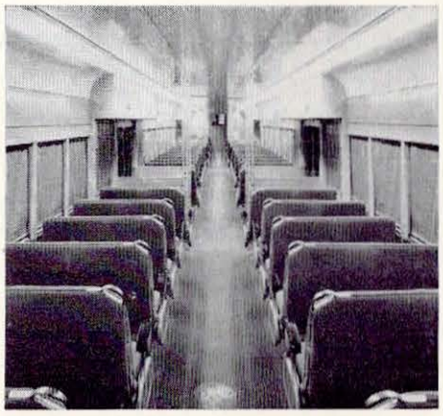
NEW YORK • CHICAGO • ST. LOUIS • HOUSTON

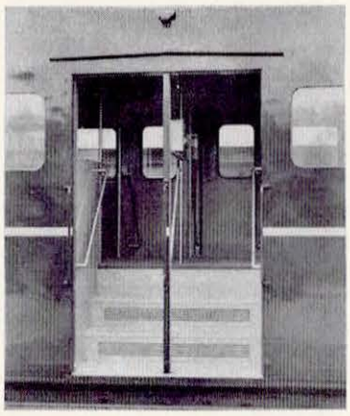


Constructed of light weight corten steel, the new cars have an exterior color scheme of Pullman green with a gold stripe trim. The interiors of the cars have varying paint treatments of gray, tan and blue, all of soft shades. All metal fittings are chromium plated. The Walkover form-fitting seats are of light brown fabric with plastic arm rests.

Safe and Easy Riding—the tightlock coupler holds the cars tightly together, reducing side sway and coupler slap to a minimum, thus assuring easier, smoother rides. Rubber buffers and draft gears, which eliminate draft gear slap, absorb the shocks of starting and stopping.







Fast, Easy Access and Exit—there are two sets of electro-pneumatic controlled sliding doors on each side of the car inside of the vestibule at the ends. The doors can be opened from any position in the train. Passengers can enter or leave the car four at a time. Hand rails and low tread, anti-slip metal steps allow easy access and exit from the cars. The lowered floor, which compensates for the lower tread, moves the center of gravity downward and contributes to easy riding qualities. **Full Vision** is provided by the row of fluorescent lighting over each seat and the large shatterproof, thermopane windows are tinted for heat and glare resistance. Thermostat controlled steam heat keeps the Fiberglas insulated cars warm in the winter. Air-conditioning of some of the cars and forced air ventilation of the others adds to summer comfort. Trains assigned to the longer suburban runs have wash rooms and toilet facilities.

SUBSIDIARY OF

PULLMAN-

CAR BUILDING DIVISION

79 EAST ADAMS STREET, CHICAGO 3, ILL. • BIRMINGHAM

for Rock Island commuters

Look at the records. That is where you will find the real proof of design excellence and sound, economical construction.

About two years ago, twenty new streamline suburban cars, similar to the one illustrated to the left, were put into service. The cars were designed to incorporate features which Rock Island executives believed were necessary to provide satisfactory service from both the commuters' and railroad's standpoints. These cars were constructed by Pullman-Standard to meet new safety, comfort and convenience requirements—to assure new operating economies. Today, both the commuters and the records attest to the success of these Rock Island cars.

PULLMAN-STANDARD helps provide

The Rock Island suburban cars are 85 feet in length with a seating capacity for 100 patrons. Each car is equipped with all-coil spring trucks with roller bearings, snubbers, and shock absorbing devices for easy riding. Smooth starting and stopping of the equipment is assured by tightlock couplers, high speed electric brakes, and the smooth action of the diesels, which provide the power. Twelve of the cars are air-conditioned, and the others have a system of forced, filtered air ventilation.

new highs in safety and comfort

All of these cars meet A.A.R., I.C.C. and R.P.O. requirements. They afford an excellent example of the ideal combination of maximum safety and comfort in commuter service. If you are interested in passenger cars—no matter how many—no matter what type—why not talk over your requirements with a Pullman-Standard representative? It will probably save you time and money to do so.

Congratulations to the Rock Island on its 100th anniversary

PULLMAN INCORPORATED

PULLMAN-STANDARD CAR MANUFACTURING COMPANY

PITTSBURGH • NEW YORK • SAN FRANCISCO • WASHINGTON

NEW! light, compact, D-C field

ENGINE-DRIVEN WELDER

with A-C power take-off

FIELD MAINTENANCE

FARM AUXILIARY POWER

PIPELINE CONSTRUCTION

A UNIT WITH MANY APPLICATIONS!

The new Westinghouse Engine-Driven Welder was developed for construction and field-maintenance operations. It provides 200 amperes of d-c current for welding. It also provides 3,000-watt, 110-volt, a-c current for stand-by power. By simply plugging into convenient receptacles on the a-c power panel, the operator may obtain power for drills, grinders, pumps, lights and other electrical equipment.

The standard unit is skid mounted for truck transport or may be mounted on a high-speed, pneumatic-tired trailer. Ready for field service, the unit weighs only 1,150 pounds and measures 39½″ high by 62⅝″ long in the stationary model.

The standard model has hand-crank start. Battery start is also available.

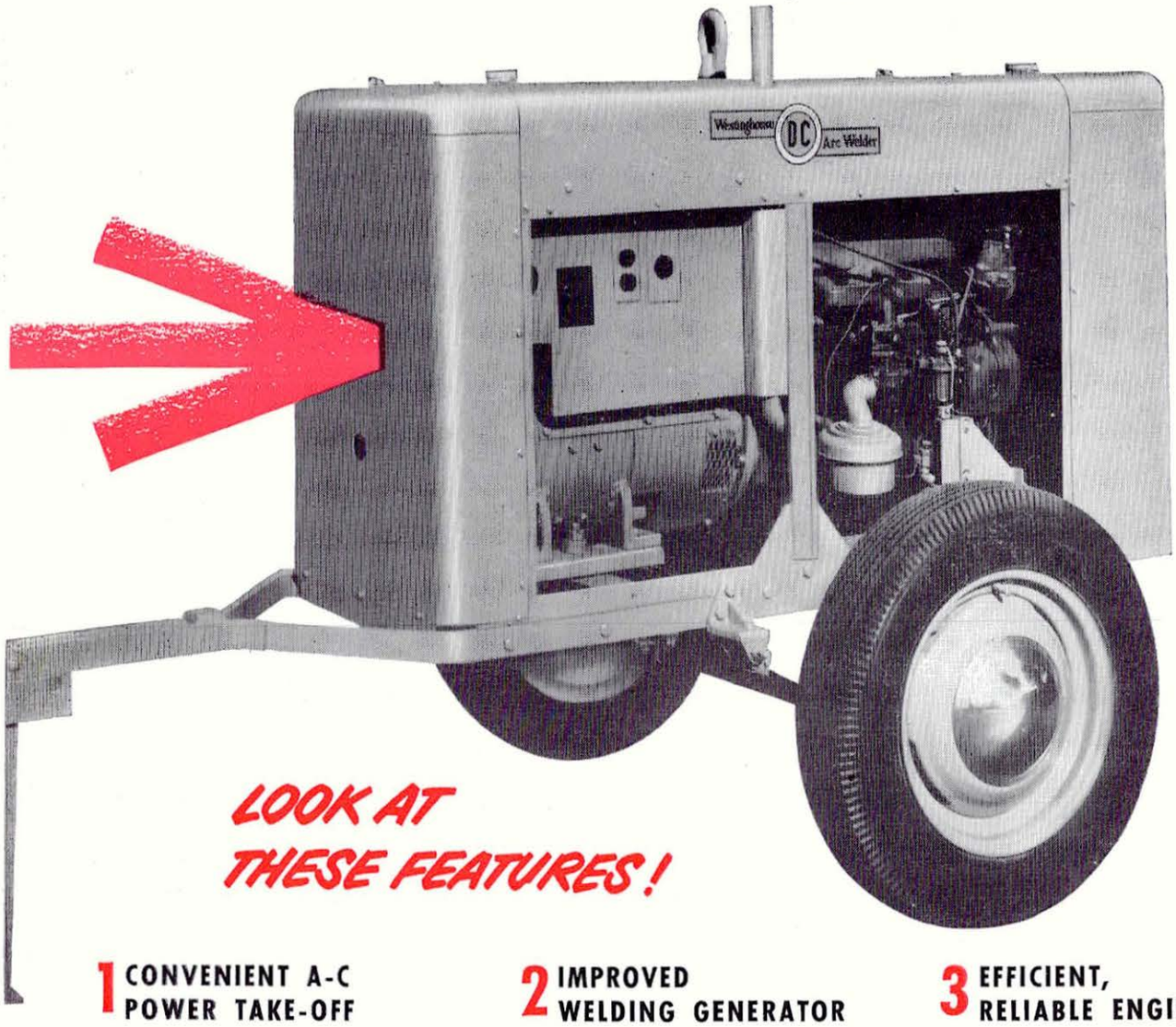
A large toolbox for storing cables, helmets, electrodes, tools and other accessories is also included if desired.

FOR MORE INFORMATION

Write to the Westinghouse Electric Corporation, Welding Division, Buffalo, New York, or contact your nearest Westinghouse representative.

J-21611

welder PLUS stand-by power!



LOOK AT THESE FEATURES!

1 CONVENIENT A-C POWER TAKE-OFF

3 kw stand-by power can be obtained without using a bulky, auxiliary rotating machine. The operator simply plugs into one of the convenient 110-volt, a-c receptacles. This stand-by power is extremely beneficial when ordinary sources of power are not available.

2 IMPROVED WELDING GENERATOR

Closely coupled to the driving engine, this new improved generator makes it easier to strike and maintain a steady welding arc. No exciter is required. Welding current ranges from 40 amperes at 20-load volts to 250 amperes at 40-load volts.

3 EFFICIENT, RELIABLE ENGINE

The new welder is equipped with a performance-proved, 4-cylinder, liquid cooled, Ford industrial engine. It is rated 30 maximum and 25 continuous horsepower at 1,800 rpm. The engine is equipped with oil filter and oil-bath air cleaner.

YOU CAN BE SURE...IF IT'S
Westinghouse
WELDING EQUIPMENT

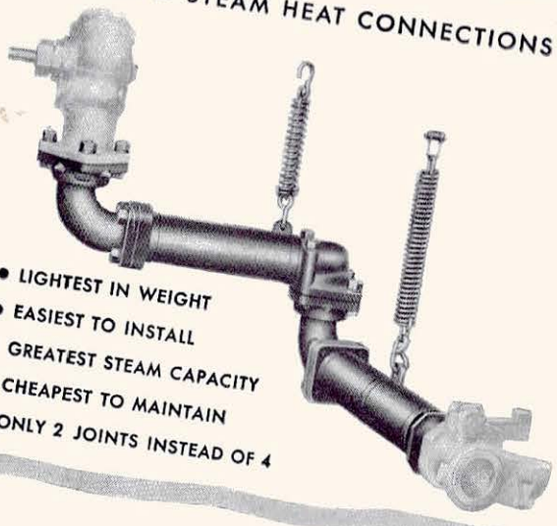
BARCO
-aiding Railroad Progress!

The long recognized dependability of Barco Products for Railroad Service stems directly from *superior* engineering and *superior* construction. Use these modern aids to Efficiency . . . Better Service . . . Lower Costs. *BARCO stands for RAILROAD PROGRESS!*

BARCO SPEED RECORDERS

Barco builds a complete line of Speed Indicators and Speed and Operation Recorders for installation on diesel, steam, and electric locomotives. Rugged in construction, yet compact and easy to install, these instruments feature Barco's exclusive ALL-MECHANICAL design which has been proven definitely superior in accuracy, dependability, and all-around performance. Now in use on railroads everywhere, Barco Recorders provide facts needed to insure efficient, profitable, and safe operation of motive power. *Ask Barco to give you the complete story.*

BARCO STEAM HEAT CONNECTIONS

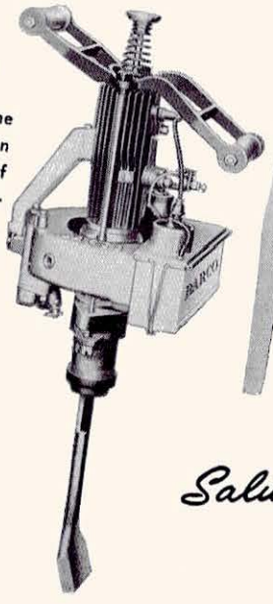


- LIGHTEST IN WEIGHT
- EASIEST TO INSTALL
- GREATEST STEAM CAPACITY
- CHEAPEST TO MAINTAIN
- ONLY 2 JOINTS INSTEAD OF 4

BARCO SWITCH ENGINE RECORDER

The Barco Switch Engine Recorder is a modern "time study" instrument that makes a chart record of what your switch engines are doing each day. These simple, accurate instruments provide Operating Departments with FACTS needed to eliminate many delays, reduce overtime costs, and get more work handled. Quickly installed and easy to use, the Recorder shows: Speed . . . Time . . . Mileage—and clearly records: Time the locomotive is idle . . . Time it is moving . . . Speed . . . Distance traveled forward and in reverse.

BARCO UNIT "TYTAMPER"



Use the Barco Portable Gasoline "Tytamper" for track construction and maintenance work. Years of experience have proved it is unexcelled for work on cross-overs, interlocking switches, and breaking ice or frozen cinders. Lowest in first cost and lowest in maintenance cost, the Barco "Tytamper" is heavy enough to go through cemented ballast, yet is light in weight and easy to handle.

BARCO Manufacturing Co.

1800-L Winnemac Avenue
Chicago 40, Illinois

Saluting . . .

1852-1952

A TRIBUTE FROM A SINGING PEOPLE...

"Oh, the Rock Island line is a mighty good road..."

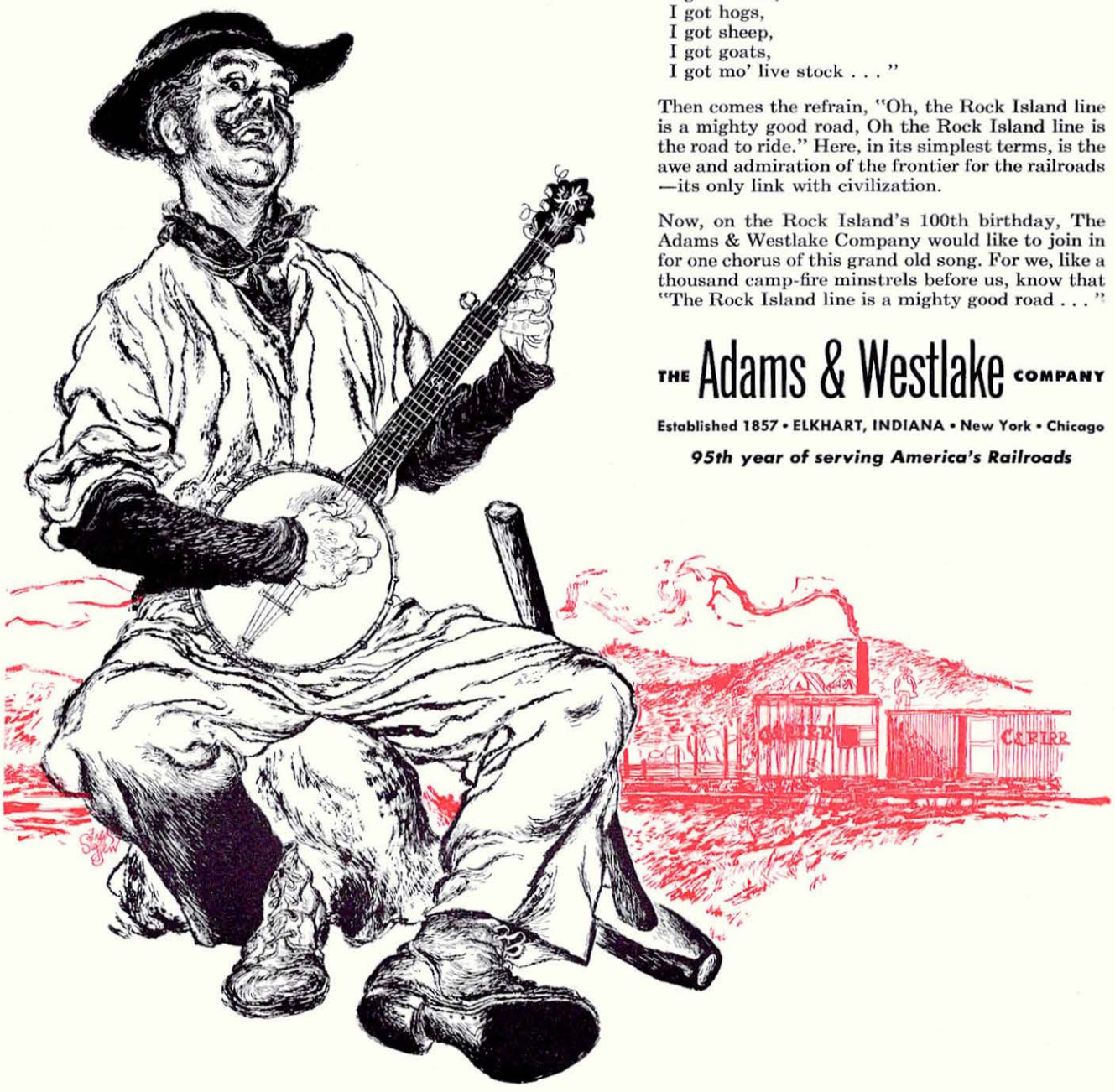
In this happy land of ours, men make music about the things they like the best. During the last century, three great folk songs have sprung from the railroads. Two of them, *Casey Jones* and *John Henry*, celebrate railroad men . . . the third, *The Rock Island Line*, is a tribute to a road itself.

Remember the first verse? The engineer on a Rock Island train talks to a station-master on his whistle, and he seems to say

"I got cows,
I got horses,
I got hogs,
I got sheep,
I got goats,
I got mo' live stock . . . "

Then comes the refrain, "Oh, the Rock Island line is a mighty good road, Oh the Rock Island line is the road to ride." Here, in its simplest terms, is the awe and admiration of the frontier for the railroads —its only link with civilization.

Now, on the Rock Island's 100th birthday, The Adams & Westlake Company would like to join in for one chorus of this grand old song. For we, like a thousand camp-fire minstrels before us, know that "The Rock Island line is a mighty good road . . . "

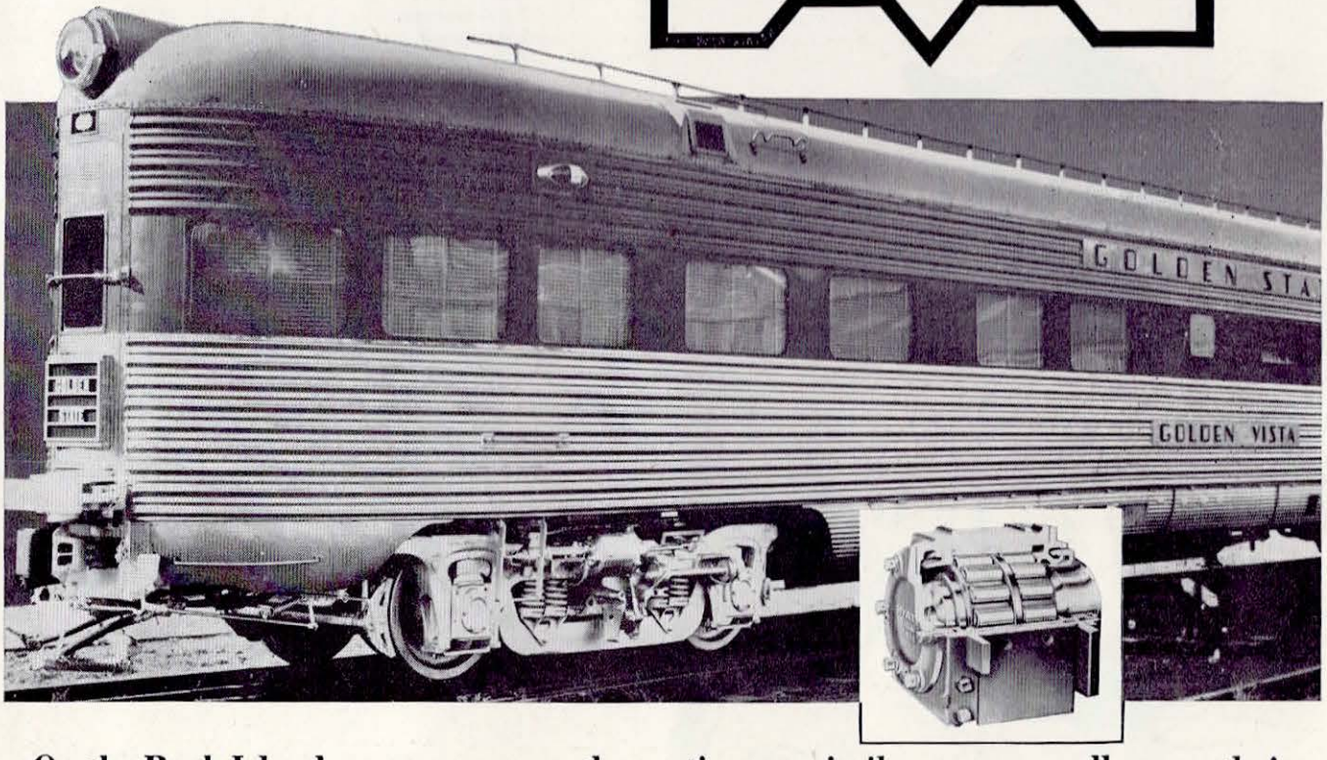


THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago

95th year of serving America's Railroads

HYATT *congratulates* the ROCK ISLAND



On the Rock Island, as on so many other progressive railroads Hyatt Roller Bearing Journal Boxes have been "Proved by Performance" for a quarter of a century.

Since 1927, when the first Rock Island installations of Hyatts were made on fifteen of their suburban coaches, many more Hyatt Roller Bearing Journal Boxes have gone into profitable operation on similar cars as well as on their through-train equipment and Diesel locomotives.

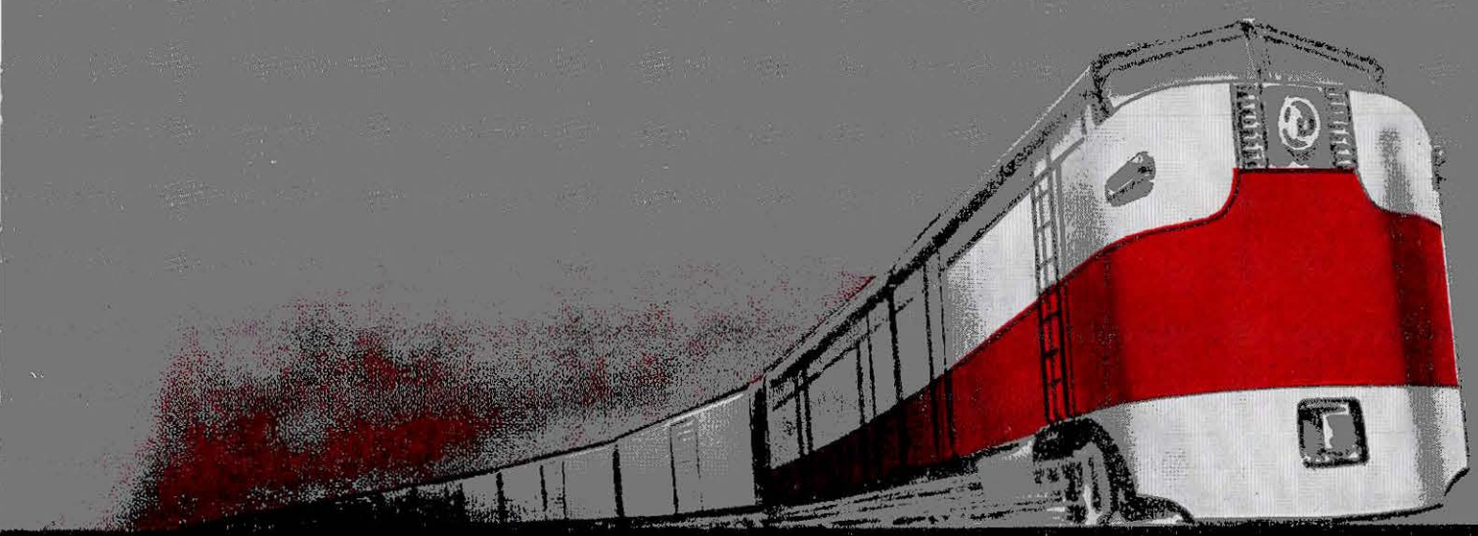
So today, as this great railroad completes a century of outstanding service to its customers, we are proud to salute and number the Rock Island among the many customers we too serve so well.

Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

HYATT ROLLER BEARING JOURNAL BOXES

for 75 *years*

THE LARGEST SUPPLIER OF RAILROAD CAR WHEELS



Griffin

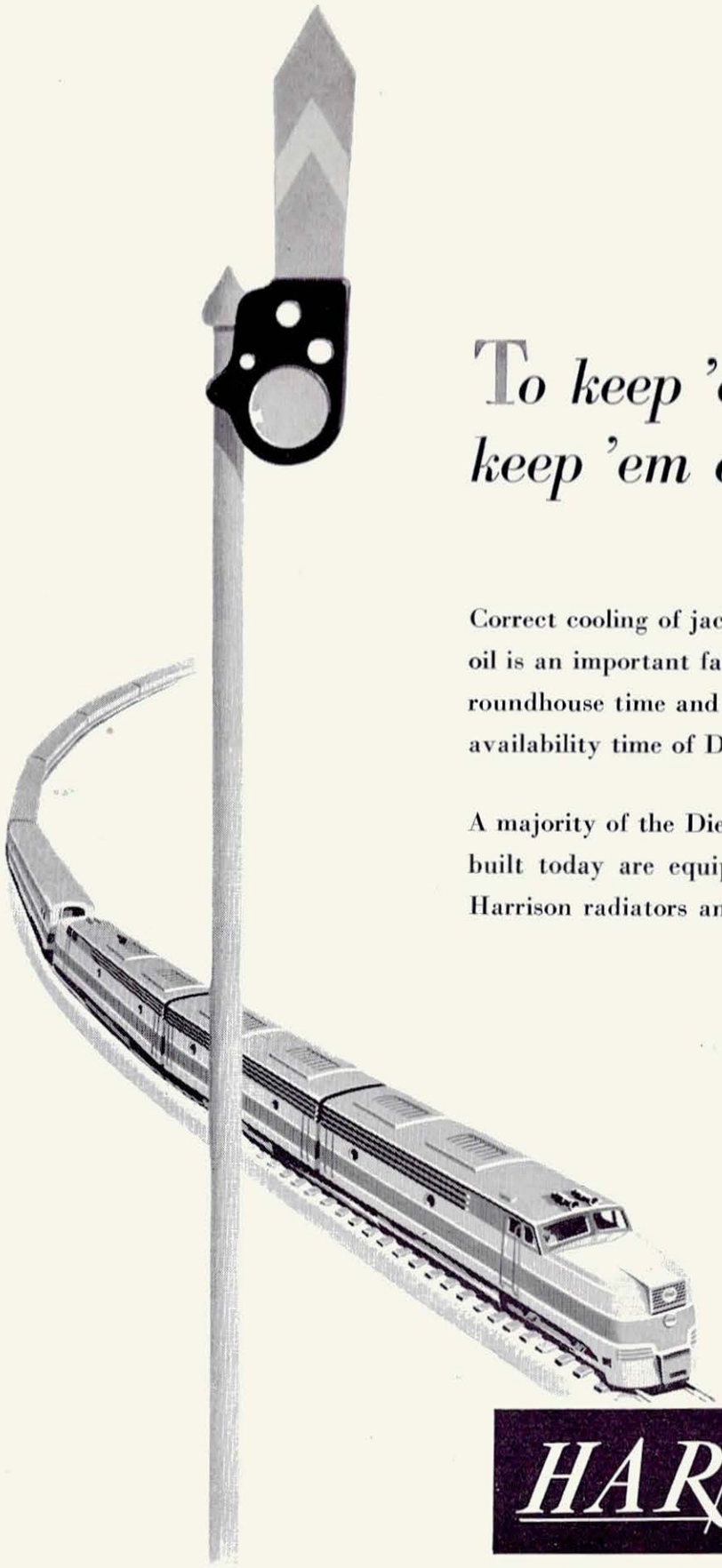
GRIFFIN WHEEL COMPANY

410 N. MICHIGAN AVE., CHICAGO 11, ILLINOIS

TACOMA • LOS ANGELES • SALT LAKE CITY • DENVER • ST. PAUL • KANSAS CITY
COUNCIL BLUFFS • CHICAGO • DETROIT • CINCINNATI • BOSTON

Member AMCW ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

Listen to the RAILROAD HOUR: NBC Network, Monday Nights



To keep 'em rolling, keep 'em cooled!

Correct cooling of jacket water and lube oil is an important factor in reducing roundhouse time and increasing the availability time of Diesel locomotives.

A majority of the Diesel locomotives built today are equipped with Harrison radiators and oil coolers.

HARRISON

DIESEL RADIATORS AND OIL COOLERS

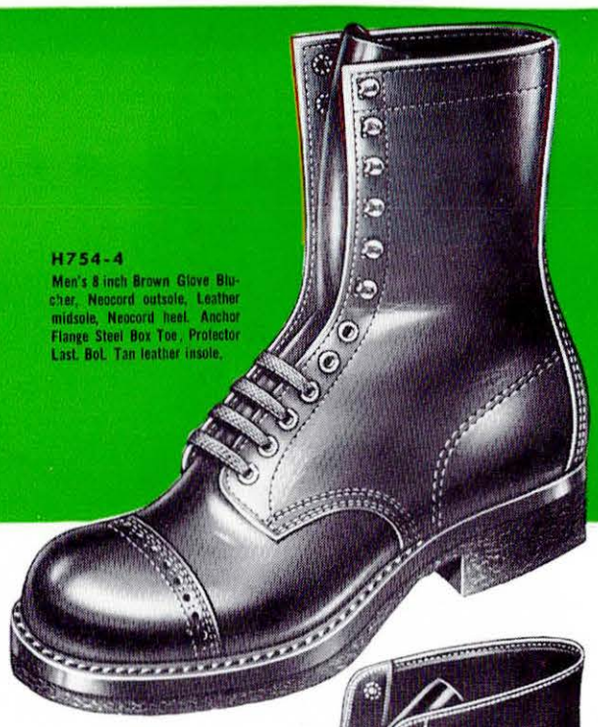
HARRISON RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, N. Y.

HY-TEST

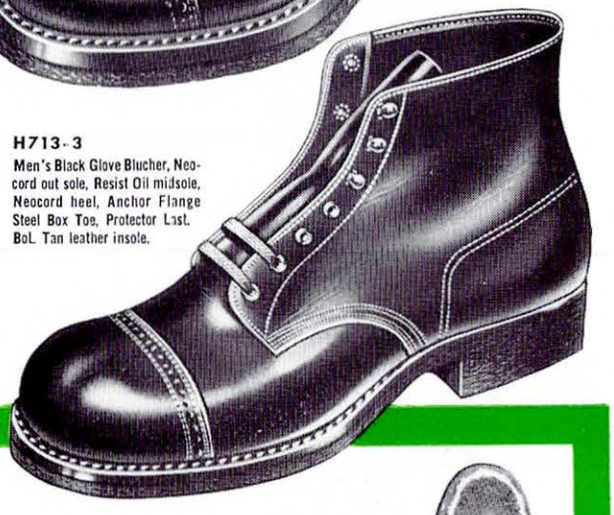
the ONLY Safety Shoes with

BoL Tan®

Sweat-resistant Leather Insoles!



H754-4
Men's 8 inch Brown Glove Blucher, Neocord outsole, Leather midsole, Neocord heel, Anchor Flange Steel Box Toe, Protector Last. BoL Tan leather insole.



H713-3
Men's Black Glove Blucher, Neocord out sole, Resist Oil midsole, Neocord heel, Anchor Flange Steel Box Toe, Protector Last. BoL Tan leather insole.

ADD UP TO TWICE THE WEAR!

No other safety shoe offers the benefits of the exclusive, new *BoL Tan* sweat-resistant leather insole. HY-TEST Safety Shoes now increase worker comfort and productiveness with *BoL Tan* leather insoles in every pair.

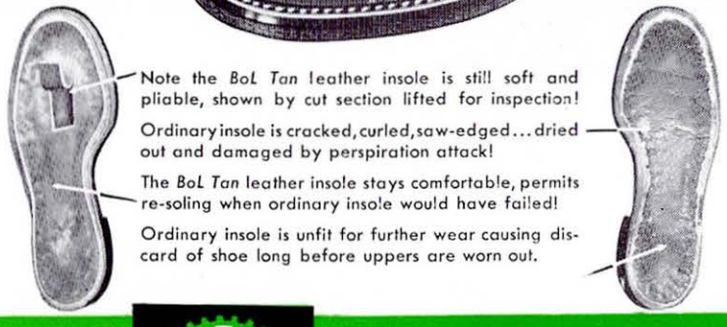
The life of any shoe depends on the insole. That's why *BoL Tan* sweat-resistant leather insoles extend shoe life as much as 100%, because they withstand the damaging effects of foot perspiration.

This means that your workers and all wearers of safety shoes can increase the *value* of their purchases and be more comfortable while at work when they buy and wear HY-TEST SAFETY SHOES.

Only the BoL Tan leather insole resists the damaging effects of perspiration!

AT NO EXTRA COST!

Here are two insoles from a single pair of shoes worn in a foundry for seven months. The one from the left shoe is a *BoL Tan* leather insole; the other is a regular quality leather insole.



Note the *BoL Tan* leather insole is still soft and pliable, shown by cut section lifted for inspection!

Ordinary insole is cracked, curled, saw-edged... dried out and damaged by perspiration attack!

The *BoL Tan* leather insole stays comfortable, permits re-soling when ordinary insole would have failed!

Ordinary insole is unfit for further wear causing discard of shoe long before uppers are worn out.

HY-TEST

ANCHOR FLANGE*

SAFETY SHOES

*TRADEMARK REG. U. S. PAT. OFF.

The World's Largest Selling Safety Shoe

Division of International Shoe Company, St. Louis 3, Mo.

New York Office: Suite 1708, 225 W. 34th St.

HY-TEST SAFETY SHOES

Use this handy coupon for details on HY-TEST's BoL Tan leather insoles

HY-TEST SAFETY SHOES, Dept. R-10
Division of International Shoe Company
St. Louis 3, Missouri

Please send me free copy of your folder explaining the advantages of BoL Tan leather insoles.

Name.....

Firm.....

Address.....

City.....*Zone*.....*State*.....

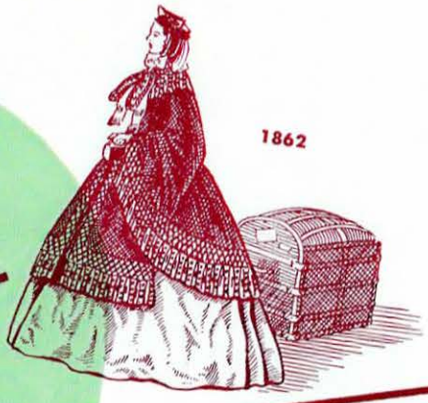
A CENTURY OF SERVICE

1852 ★ *Rock Island Lines* ★ 1952

In 100 years, styles change. Railroads change. But on the Rock Island, one factor remains constant. The determination to give more comfortable passenger service...speedy, reliable freight service.

And they have succeeded!

One hundred congratulations, Rock Island.



1862

1872

1882

1892

1902

1912

1942

1932

1922

E R I C A N C A R A N D F O U N D R Y C O M P A N Y

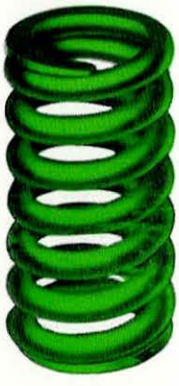
YORK • CHICAGO • ST. LOUIS • CLEVELAND • PHILADELPHIA • WASHINGTON • SAN FRANCISCO

s-m-o-o-t-h

It's the *little* things that passengers remember about Rock Island's smooth service . . . the good night's sleep . . . the nickless shave . . . the cup of coffee in a dry saucer.

And it's the little things (comparatively) that contribute most to that smooth service . . . like Rock Island's thousands of RAILWAY STEEL SPRINGS.

RAILWAY STEEL SPRINGS smooth out bounce and bump, help make railroad travel a pleasure. They help make railroad *operation* a pleasure, too . . . they cut freight-damage and road-bed maintenance costs, lengthen the life of rolling stock.



For RAILWAY STEEL SPRINGS are born on the drafting board. And behind every RAILWAY STEEL SPRING are the years of experience of one of America's oldest makers of railway springs.

Specify "RAILWAY."

Railway Steel-Spring

A DIVISION OF AMERICAN LOCOMOTIVE COMPANY

New York • Cleveland • Chicago • Richmond • St. Louis • St. Paul • San Francisco

Our Congratulations to

ROCK ISLAND LINES

Route of the Rockets

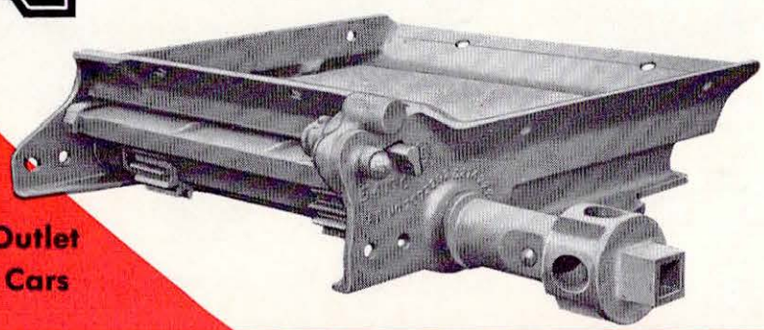
ON ITS CENTENNIAL ANNIVERSARY

A CENTURY OF SERVICE

1852 • *Rock Island Lines* • 1952

Rock Island

Rock Island Covered Hopper Car Equipped with Enterprise Outlets



Enterprise Patented Outlet for Covered Hopper Cars

4265

DOOR OPERATING DEVICES EXCLUSIVELY SINCE 1903

ENTERPRISE RAILWAY EQUIPMENT COMPANY

59 East Van Buren Street · Chicago 5, Illinois

a Century of Progress

and still going strong!

The faith of the Pioneers who planned and built the Rock Island Lines has been amply rewarded during its first Century of Progress, and its enterprise is continuing unabated in its second Century of Service to America.

Cardwell Friction Bolster Springs
for A.A.R. and Long Travel Springs

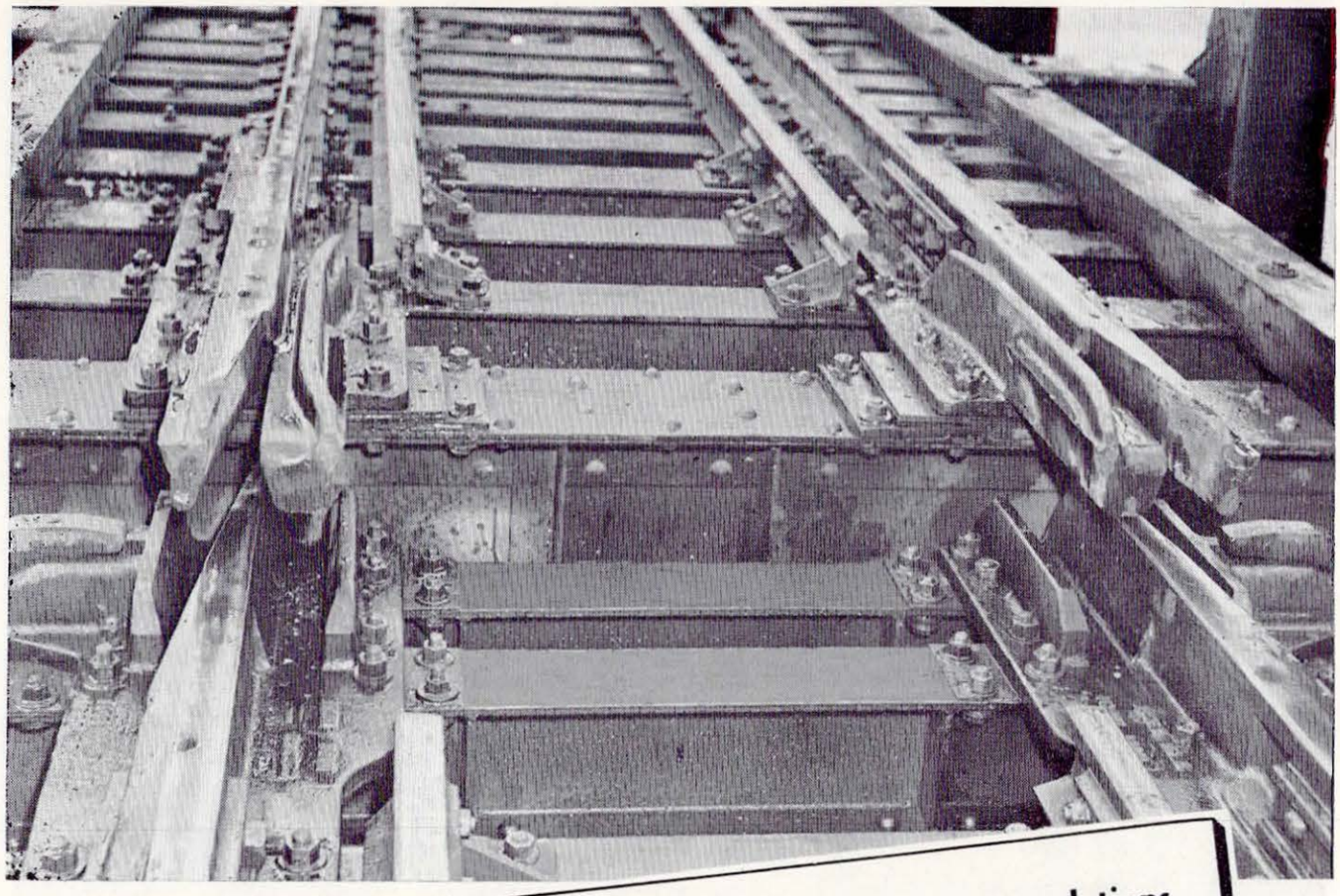
Westinghouse Friction Draft Gears
Certified A.A.R.

A CENTURY OF SERVICE
1852 · Rock Island Lines · 1952

CARDWELL WESTINGHOUSE HAS ENJOYED THE PRIVILEGE OF SERVING THE ROCK ISLAND LINES FOR MANY YEARS

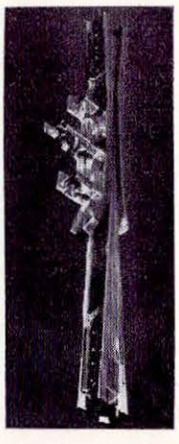
According to the Association of American Railroads, more than 98% of cars in freight carrying service are A.A.R. construction and are equipped with Friction Draft Gears.

Cardwell Westinghouse Co., Chicago
Canadian Cardwell Co., Ltd., Montreal



Rock Island lift bridge over the White River, Arkansas, equipped with Conley Manganese Expansion End Rails.

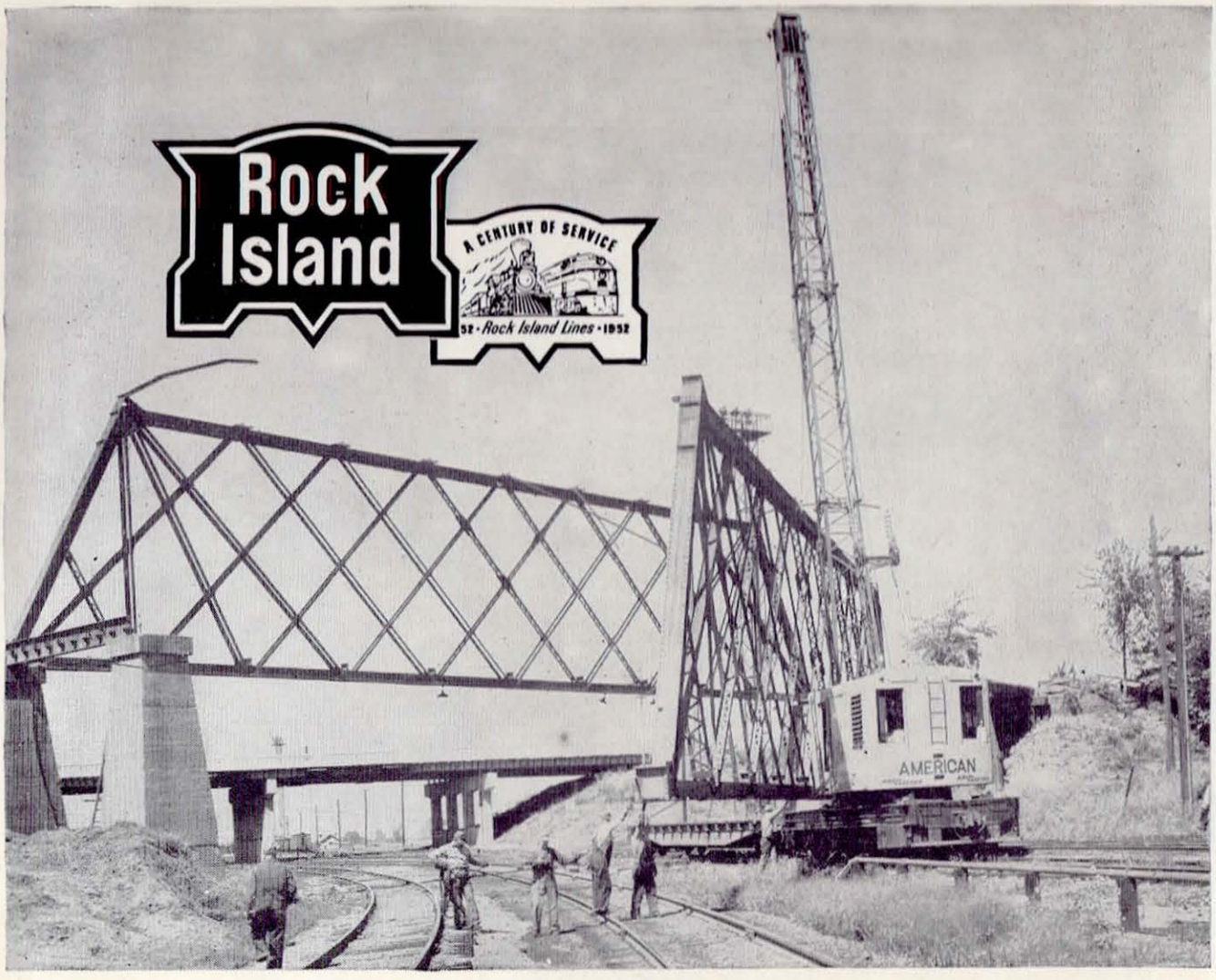
Our hearty congratulations upon your "Century of Progress"



● From our location at the Eastern Terminus of the Rock Island at Memphis we have watched with growing interest the steady forward march of your improvement through many years. In this progress toward speedy service and lower maintenance costs Conley Manganese Expansion End Rails have been installed on movable bridges such as shown in the illustration of the White River bridge near Memphis.

Conley Frog & Switch Company
Memphis, Tennessee
W. A. Summerhays, Sales Engineer, 7427 Merrill Ave., Chicago 49, Ill.

CONLEY
★ EXPANSION RAILS · SPRING FROGS



100 years young...and building for the future with the American DiesELectric

Here at Silvis, Illinois, in 1952, the Rock Island lines took another step toward smoother, faster operation in its second century of operation. The old bridge had outlived its usefulness, and had to be removed to straighten a curve. So an American DiesELectric locomotive crane rolled in . . . the bridge was dismantled in 20-ton sections . . . and without any traffic delays the job was done.

The Rock Island, like every other progressive railroad, knows well the dollars-and-cents advantages of the *modernized* locomotive crane. That's why they take care of heavy construction and materials handling with the American DiesELectric. This ulra-modern locomotive crane, with diesel power to the deck, electric power to the trucks, gives them instant starts . . . one-man operation . . . uninterrupted work days . . . marvelous smoothness, and tremendous power.

If it's time for a change in your equipment, choose an American . . . Diesel and DiesELectric types capacities from 25 to 80 tons.

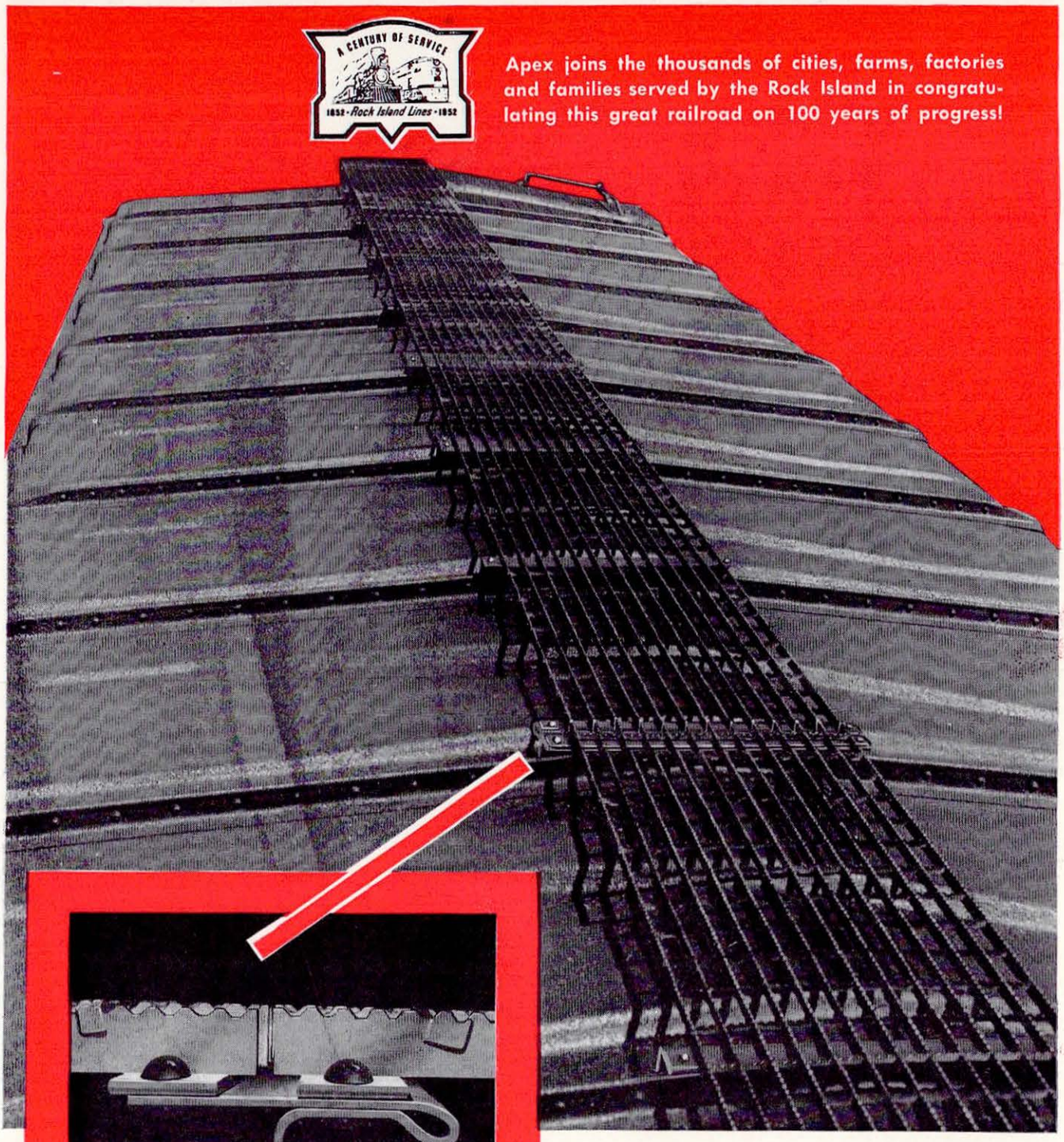
2606

Modernize...economize...with

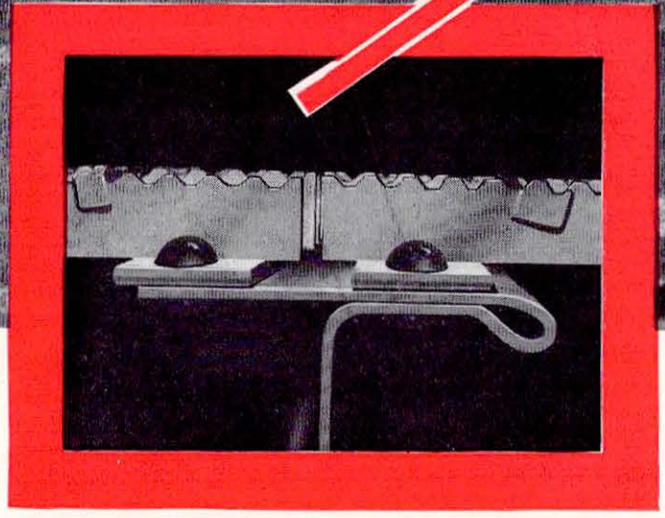
American Hoist
& Derrick Company
ST. PAUL 1, MINNESOTA

For the BIG PRODUCTION jobs of industry...

AMERICAN LOCOMOTIVE CRANES



Apex joins the thousands of cities, farms, factories and families served by the Rock Island in congratulating this great railroad on 100 years of progress!



FIRST with open type metal running boards.

Now, **FIRST** with *permanent* riveted application . . . inquire about its economy.

APEX *Railway Products Co.*

332 SOUTH MICHIGAN AVENUE
CHICAGO 4, ILLINOIS

FLAME... for a "PAINT READY" SURFACE

AIRCO flame cleaning removes mill scale and crusted deposits *completely* – as only searing heat can do the job. Old paint and rust disappear... leaving the surface clean and moisture free – ready for immediate protective coating. The sooner you paint after flame cleaning, the better the job!

AIRCO provides a number of special-application flame cleaning tips. For structural steel . . . car sides and underframes . . . angle bar sections of rails . . . as well as special tip assemblies to prepare axles for magnetic particle inspection. All are readily adaptable to your present welding equipment.

AIRCO recommends the proper equipment . . . assists you in designing flame cleaning positioners and fixtures for special applications . . . maintains a fully-staffed Railroad Technical Department to help you in the initial stages of any flame cleaning operation. Contact your nearest Airco office!

at the frontiers of progress you'll find

AN AIR REDUCTION PRODUCT

A CENTURY OF SERVICE
1852 · Rock Island Lines · 1952

AIRCO®

AIR REDUCTION

AIR REDUCTION SALES COMPANY · AIR REDUCTION MAGNOLIA COMPANY
AIR REDUCTION PACIFIC COMPANY
REPRESENTED INTERNATIONALLY BY AIRCO COMPANY INTERNATIONAL
Divisions of Air Reduction Company, Incorporated
Offices in Principal Cities

CONGRATULATIONS TO A GREAT RAILROAD!

Amcreco

extends its heartiest congratulations

to the Rock Island on its 100th birthday

Amcreco
Lowry Process
Creosoted Products

Pressure Treated

Adzed and Bored Cross Ties

Bridge Ties

Timbers

Piles

As a supplier to the Rock Island since February, 1908 — nearly 45 years — it gives us great pleasure to take part in the 100th birthday celebration of this great American institution. It gives us great pleasure to feel we have grown with the Rock Island and played a part in helping the Rock Island in the development of vast areas of this country through the medium of fast, economical transportation services for goods and people.

We sincerely hope we can serve the Rock Island through its next 100 years of service to America.

AMERICAN CREOSOTING COMPANY

COLONIAL CREOSOTING COMPANY INCORPORATED

AMCREO LOWRY PROCESS CREOSOTED WOOD

GEORGIA CREOSOTING COMPANY INCORPORATED

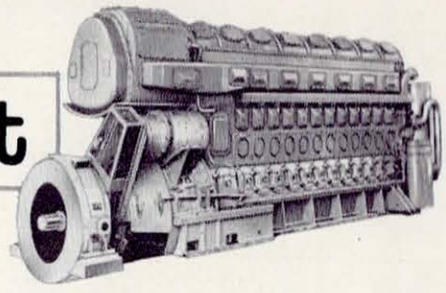
GENERAL SALES OFFICE—CHICAGO, ILLINOIS
18 FIELD SALES OFFICES TO SERVE YOU

FAIRBANKS-MORSE

First

in Locomotive Progress

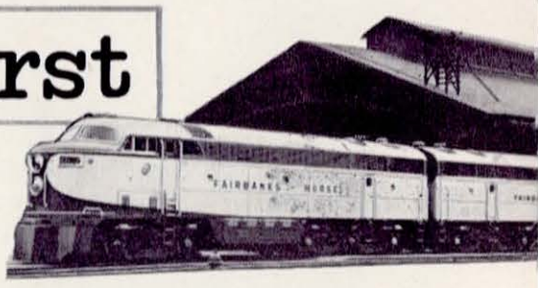
First



. . . with a new diesel engine that combines all the basic advantages required for railroad service—the Opposed-Piston diesel engine by Fairbanks-Morse.

Four great O-P engines: 1200, 1600, 2000, and 2400 hp. All offer the basic O-P advantages of more power per foot of length, maximum interchangeability of parts, no valves, no cylinder heads—40% fewer moving parts—and a five million horsepower record of low-cost maintenance. Add fuel and lube oil economy and you have the finest in railroad motive power—the O-P engine.

First



. . . with a complete new line of road locomotives that reveals new concepts of basic diesel locomotive design—the "Consolidation" Line Locomotives by Fairbanks-Morse.

"Consolidation" Line locomotives set new standards for versatility, tracking qualities, easier maintenance, and pulling ability at all speeds. Maximum interchangeability of components and "unitized" construction simplifies maintenance. Built on one standard car body, C-Line road passenger and freight locomotives can be equipped with any size O-P engine . . . any one of six gear ratios.

and now...

TM

. . . the new Symbol in railroad motive power that brings new opportunity for greater operating efficiency in *all* classes of service.

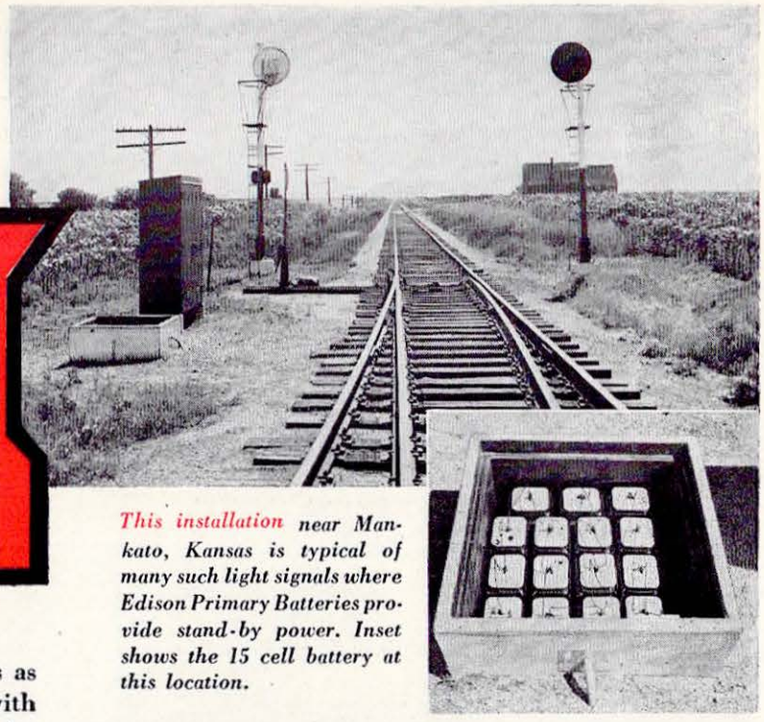
Watch For the Newest Symbol in Railroading Today!

First ***Universal railroad motive power unit.***

FAIRBANKS-MORSE

a name worth remembering when you want the best

DIESEL LOCOMOTIVES AND ENGINES • ELECTRICAL MACHINERY
PUMPS • SCALES • RAIL CARS • FARM MACHINERY • MAGNETOS
HOME WATER SERVICE EQUIPMENT



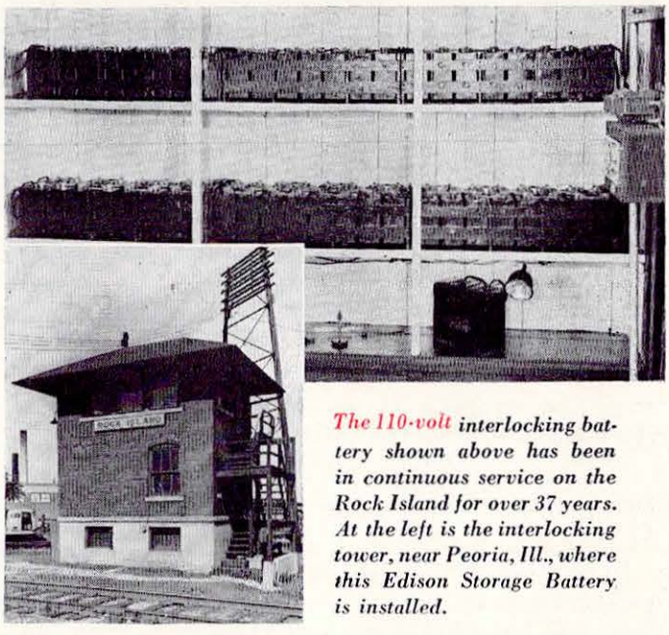
This installation near Mankato, Kansas is typical of many such light signals where Edison Primary Batteries provide stand-by power. Inset shows the 15 cell battery at this location.

IN 1852 THE ROCK ISLAND began operations as a modest little road connecting Chicago with Joliet, Illinois. The first 6-car train, pulled by the original "Rocket" engine (with a bulge smokestack and 4′ 6″ drivers) made its initial run on October 10th, that year.

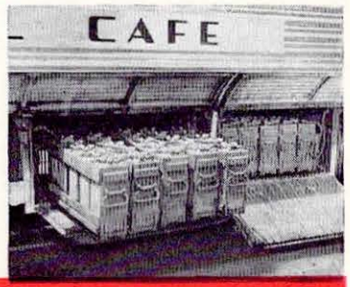
By 1854 it had pushed west to the little village of Rock Island on the banks of the Mississippi. In 1856, the historic Rock Island bridge was completed. It was the first railroad bridge to span the Mississippi River.

From that time on, the Rock Island continued to expand, until today it is a huge 8,000 mile system serving the Midlands, the South, the West, the Southwest and the Northwest. Over this great system runs a fleet of diesel-powered, streamlined "Rocket" trains — modern counterparts of that "Rocket" of 1852 which first opened the frontier to settlement and civilization; and a railroad whose fast freight service reaches the main traffic gateways to the rich Mississippi Valley and its connections.

With the Rock Island, growth and improvement have gone hand in hand. Our company has been privileged to assist this great road in advancements such as the application of electric power to installations of automatic signals, highway crossing protection and other signaling functions, and to the lighting and air-conditioning of many of its famous "Rocket" passenger cars.



The 110-volt interlocking battery shown above has been in continuous service on the Rock Island for over 37 years. At the left is the interlocking tower, near Peoria, Ill., where this Edison Storage Battery is installed.



A 50-cell A8HW battery on coffee shop-lounge-bar "Fiesta" car, a feature of the new Golden State, which provides de luxe service between Chicago and Los Angeles.

THOMAS A. EDISON, INCORPORATED

Storage Battery Division — WEST ORANGE, N. J.

Primary Battery Division — BLOOMFIELD, N. J.

Linking 10 Decades of RAILROAD PROGRESS

Solid, steady progress as a great public carrier distinguishes the Rock Island. Its growth in business, in rolling stock and in technical equipment bear able witness to the character of its management.

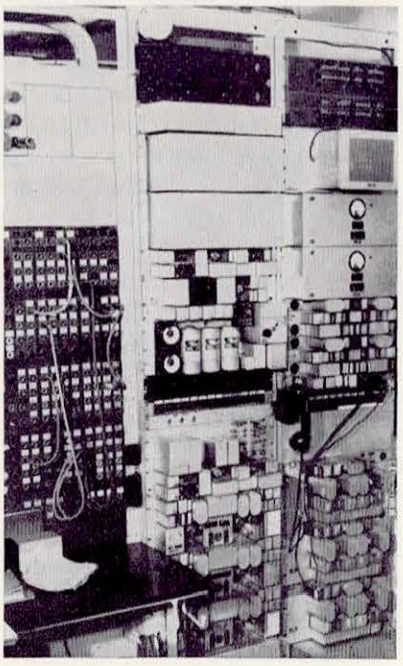
Graybar is proud to have had a part in the development and expansion of the carrier telephone installations that link the Rock Island's widespread operations.

Today this great and growing road is equipped with two Western Electric 3-carrier telephone systems which are in daily 24-hour service between Chicago and Kansas City, and between Kansas City and El Reno, Oklahoma.

In addition, the Rock Island uses 17 Western Electric H-1 single channel carrier telephone circuits, providing quick and efficient speech communication with all points of operation. Further, every station is thus within easy call of dispatchers at main operating points.

Though a relative youngster, Graybar, too, has grown through 83 years of service to the nation's railroads . . . has learned through experience how to solve electrical supply problems.

That's why railroad men say "for friendly service and on-schedule deliveries, order it via Graybar." *Graybar Electric Co., Inc. Executive Offices: Graybar Building, New York 17, N. Y.* 289-2010



100,000 Electrical Items Are Distributed THROUGHOUT THE NATION . . .

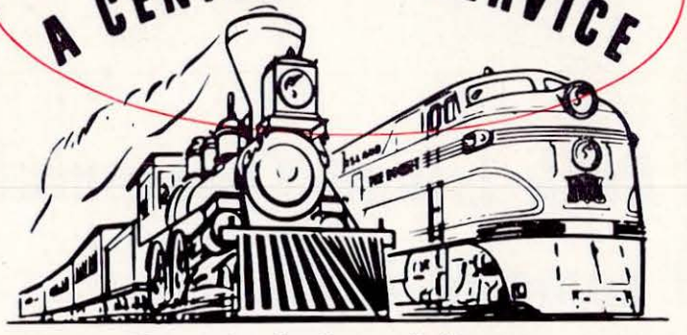
via GraybaR

OFFICES AND WAREHOUSES IN OVER 100 PRINCIPAL CITIES

Congratulations

Rock Island

A CENTURY OF SERVICE



1852 ★ *Rock Island Lines* ★ 1952

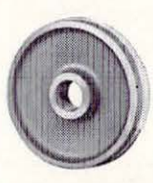
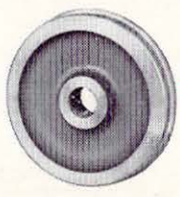
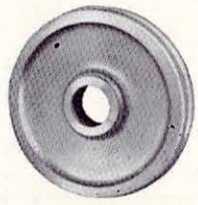
a record to be proud of!

E

Edgewater Steel Company

PITTSBURGH, PA.

Makers of Rolled Steel Wheels,

for  Freight Cars  Passenger Cars  Diesel Locomotives

Draft Gears and Rolled Steel Tires

Too bad the Rock Island Centennial didn't come in 1954...

. . . Because at that time, we could have jointly celebrated their centennial and our *50th year* of service to the Rock Island.

However, we can, and do, take consolation in our friendly customer-supplier relationship of 48 years standing.

Since 1904, we have served the Rock Island with numerous railroad products. More recently, during their passenger car building program that followed the war, we supplied them with ULTRALITE long glass fiber insulation. The progressive Rock Island was one of the first to recognize the superiority of this exceptional thermal and acoustical insulation that the majority of railroads now use in passenger, refrigerator and tank cars.

To the Rock Island management, and to our many Rock Island friends up and down the line —Congratulations on 100 years of progress and leadership in the railroad industry!

GUSTIN-BACON ULTRALITE INSULATION MANUFACTURING CO.

GUSTIN-BACON MANUFACTURING CO.

210 W. 10th St., Kansas City, Missouri

Los Angeles • Houston • Tulsa • Fort Worth • Detroit

New York • Chicago • Philadelphia • San Francisco

Serving the Nation's Railroads since 1898

For Almost Half a Century

ROCK ISLAND Has Used GUN IRON Parts

As the Chicago, Rock Island & Pacific celebrates its 100th anniversary in October, a record of constant progress in providing the best in transportation will be widely recognized. On this fine railroad, every new advancement in equipment, operation, and maintenance methods has been quickly adopted to assure the most up-to-the-minute service to its passengers and customers.

It is a matter of pride to us that soon after Hunt-Spiller started to produce Gun Iron railroad replacement parts shortly after the turn of the century, the Rock Island became one of our customers. Since that time, many thousands of Gun Iron parts—cylinder liners, cylinder heads, packing-rings, etc.—have been used by this railroad . . . first in steam locomotives and now in its modern diesels.

On the other major railroads throughout the country, Gun Iron has also been accepted as one of the best materials available for parts subject to frictional wear . . . extreme pressure . . . high heat . . . resistance to corrosion and erosion. With new and improved products constantly being developed by Hunt-Spiller, it can be expected that parts made of Gun Iron will continue to be the first choice of the progressive railroads of the future.

A NEW CATALOG of Hunt-Spiller Diesel Parts is just off the press. Details of many parts currently being produced are shown. Write for your copy—no obligation, of course.

HUNT-SPILLER GUN IRON • HSGI • AIR FURNACE PROCESS

HUNT • SPILLER

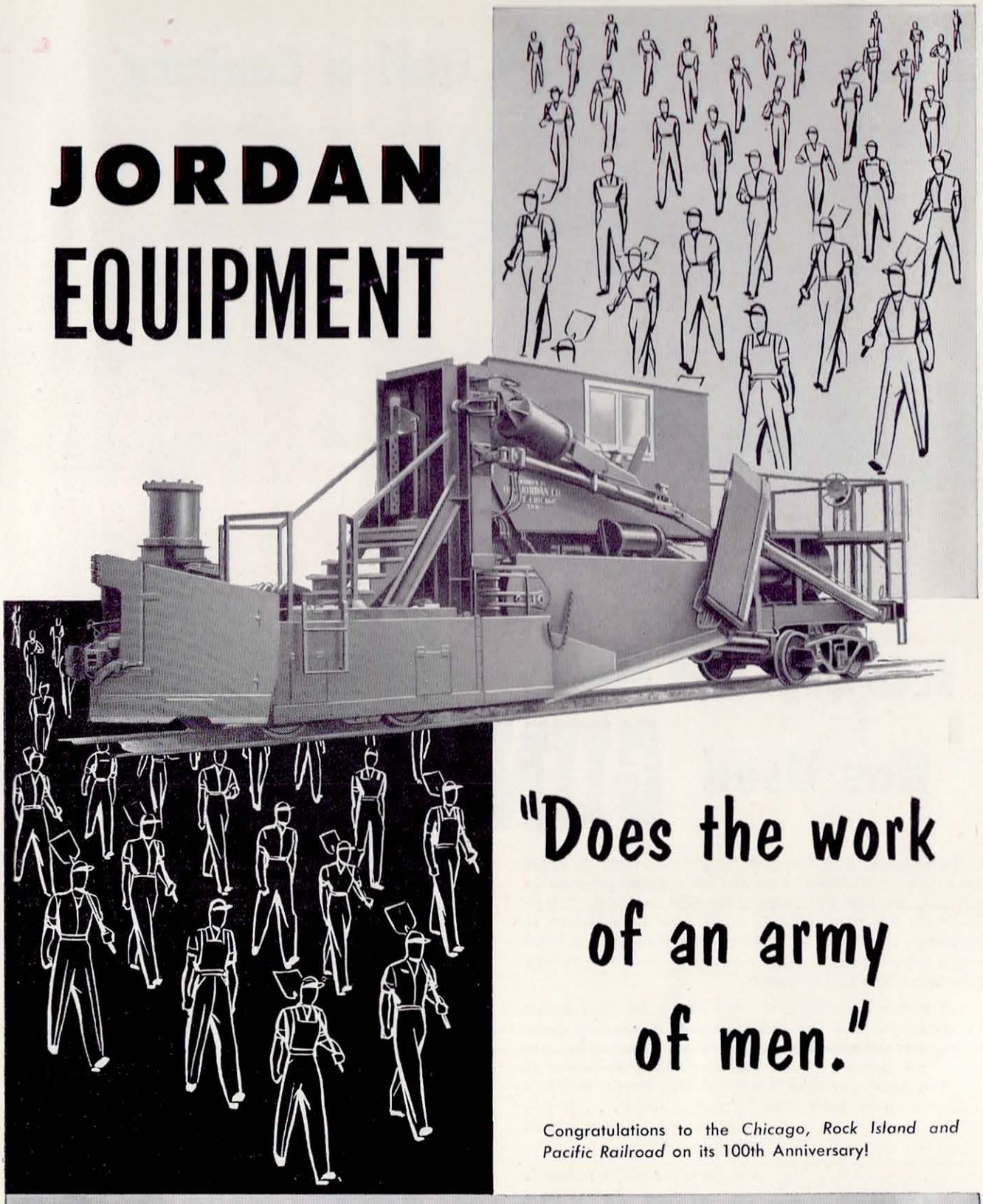
MANUFACTURING CORPORATION

379 DORCHESTER AVENUE • SOUTH BOSTON 27, MASS.

Canadian Representatives: Joseph Robb & Co., Ltd. 4050 Namur St., Montreal 16, P. Q.

Export Agents: International Rwy. Supply Co., 30 Church Street, New York 7, N. Y.

JORDAN EQUIPMENT



"Does the work of an army of men."

Congratulations to the *Chicago, Rock Island and Pacific Railroad* on its 100th Anniversary!

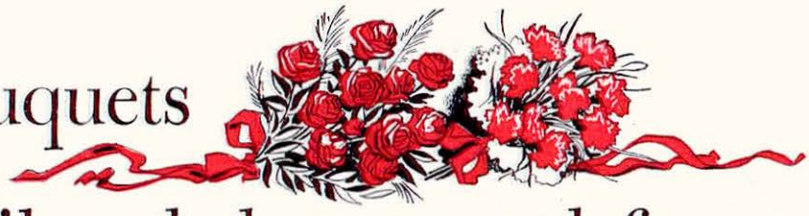
SPREADERS · DITCHERS · SNOWPLOWS

O. F. JORDAN COMPANY

WALTER J. RILEY, *Chairman of the Board*

EAST CHICAGO, INDIANA

Bouquets



to the railroad that started forward by backing up!

Rock Island

● When the Rock Island Railroad ran its first train from Chicago to Joliet in 1852, it had to *back up* for the entire 40-mile return trip—there were no turn-around facilities at Joliet. From that beginning the Rock Island has steadily progressed, leading the way in opening up the territories west of the Mississippi by extending vital rail service throughout that important section.

To serve the Rock Island, the Koppers plant at Little Rock, Arkansas was built in 1906 to supply pressure-treated wood. From that plant came most of the piling, bridge timber, and other structural wood as well as a substantial part of the cross ties for this great railway system. That the Rock Island has constantly widened its use of pressure-treated wood is convincing evidence of the performance records of these materials. We take pride in the part they have contributed to the road's high-operating standard.

Koppers congratulates the Rock Island and looks forward to serving it during still another century of continuing progress.

KOPPERS COMPANY, INC., Pittsburgh 19, Pennsylvania

KOPPERS **PRESSURE-TREATED WOOD**

Congratulations to the ROCK ISLAND on their 100th Anniversary

DETOUR FOR DRIVEN SNOW. Rock Island rolling stock will deliver on-time performance through this Iowa countryside all winter long when the TD-14A and scraper finish cutting a five-foot deep trap for the swirling snow.

Rock Island SETS TRAP for SNOW

International Power speeds line improvement project, eliminating snow pockets, improving winter service

The Rock Island has set a trap for swirling snow that in past winters has stopped or slowed traffic near Hampton, Iowa.

Resloping and cutting down shoulders as much as five feet for a one-mile stretch along the right-of-way was a typical job for one of the Rock Island's International crawler tractors. A TD-14A and scraper handled the improvement with dispatch.

G. R. Haser, the TD-14A operator, makes this report on his off-track equipment:

"I've been operating crawlers up and down the Rock Island lines for 11 years and for tractor-scraper performance I know I'm operating a tractor that can't be beaten. Railroad right-of-way work calls for a medium sized tractor with big crawler power that is easy to maneuver and built to keep working . . . and this TD-14A measures up in every way."

Call in your International Industrial Distributor for a full report on why International "Power that Pays" is your soundest long-term equipment investment in yards, shops and for right-of-way maintenance.

INTERNATIONAL HARVESTER COMPANY
CHICAGO 1, ILLINOIS

OFF-TRACK VET. After operating all makes of crawlers for 11 years, G. R. Haser rates his International No. 1 for right-of-way maintenance jobs.

INTERNATIONAL — INTERNATIONAL HARVESTER

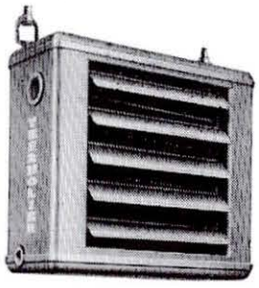
POWER THAT PAYS

THERMOLIER UNIT HEATERS

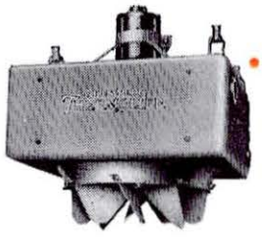
The condensed table below is a quick guide to the selection of the correct Thermolier for specific conditions. The capacities, when motors are operating at normal speeds, are based on Standard Basis of Rating: 2 lb. steam pressure and 60° F entering air temperature. Grinnell Thermoliers are tested and they are rated in strict accordance with rules of the Industrial Unit Heaters Association.

All Thermoliers can be operated at working steam pressures up to 125 psi and steam temp. up to 406° F.

A MODEL AND SIZE FOR EVERY PURPOSE

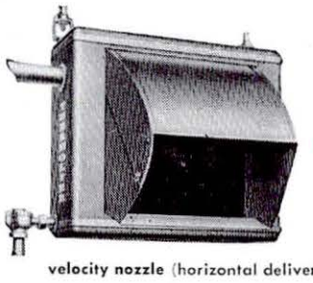


horizontal delivery



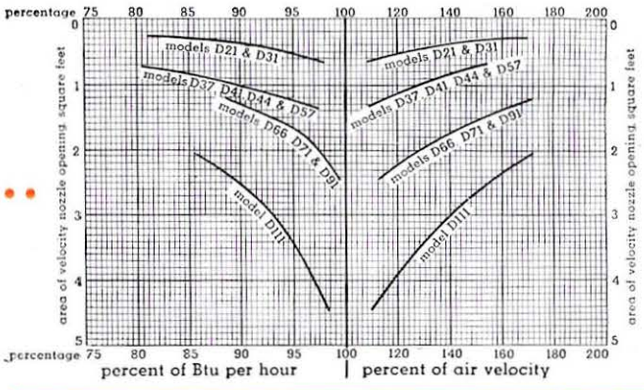
vertical delivery

performance with velocity nozzle ▶



velocity nozzle (horizontal delivery)

model	total heat delivered, Btu per hr	sq ft edr (nominal)	air velocity at exit, louvers open, lin. ft. per min.
horizontal delivery			
D21	35,600	148	786
D31	48,700	203	851
D37	62,200	259	753
D41	71,000	295	901
D44	84,100	350	887
D57	101,300	422	1016
D66	128,700	536	779
D71	151,700	632	977
D91	196,000	817	985
D111	275,300	1147	1048
vertical delivery			
VA1042	50,800	212	1399
VA1045	73,600	307	1287
VA1065	109,400	456	1354
VA1075	145,600	607	1231
VA1101	185,000	770	1495
VA1111	257,000	1071	1631


percentage 75 80 85 90 95 100 120 140 160 180 200
models D21 & D31
models D37, D41, D44 & D57
models D66, D71 & D91
model D111
models D21 & D31
models D37, D41, D44 & D57
models D66, D71 & D91
model D111
area of velocity nozzle opening square feet
0 1 2 3 4 5
percentage 75 80 85 90 95 100 120 140 160 180 200
percent of Btu per hour
percent of air velocity

GRINNELL
THERMOLIER UNIT HEATERS

CALL YOUR LOCAL GRINNELL DISTRIBUTOR

Grinnell Company, Inc., Providence, Rhode Island • Coast-to-Coast Network of Branch Warehouses and Distributors

pipe and tube fittings • welding fittings • engineered pipe hangers and supports • Thermolier unit heaters • valves
Grinnell-Saunders diaphragm valves • pipe • prefabricated piping • plumbing and heating specialties • water works supplies
industrial supplies • Grinnell automatic sprinkler fire protection systems • Amco air conditioning systems

ROCK ISLAND
FIRE DEPT
Rock Island

Trains That Really Pay Their Way

● Two Budd-built all-stainless steel trains went into service on the Rock Island fifteen years ago—September 1937. They are the Des Moines Rocket and the Peoria Rocket. Their combined cost was $804,000.

Since then they have produced a net operating profit of more than $11,500,000.

One of the factors contributing to this record is the terrific utilization Budd-built cars can take. The Peoria Rocket makes 644 miles a day, at an average speed of 61 miles per hour. The Des Moines Rocket makes 716 miles per day averaging 60 miles per hour on a run calling for nine stops.

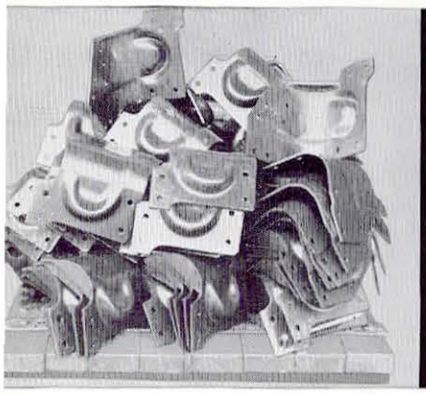
Car availability has been 98%. The trains received their first major overhaul this year. As in the case of overhauls of other Budd stainless steel trains, made after long intervals of hard service, inspection revealed that Budd-built cars simply do not wear out. None ever has.

The Budd Company, Philadelphia 32.

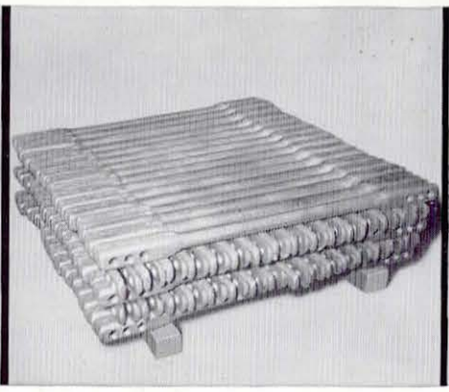
Budd

PIONEERS IN BETTER TRANSPORTATION

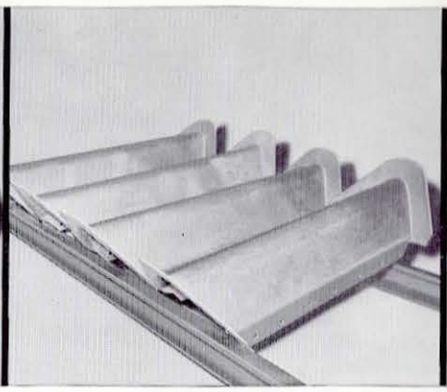
...parts and parcel to the railroad industry!



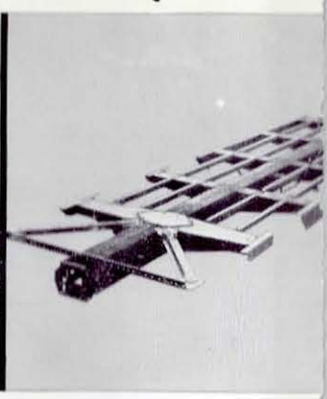
• Quantities of push-pole pockets destined for final assembly in a customer shop. Mass Production of all parts enables PSC to offer quality units at a lower cost in today's stepped-up market.



• These bottom rods are only one item produced in quantity in Pressed Steel Car's forge shops. Others include, grab irons, brackets, hooks, jaws, hinges, levers, pins and many more.



• Ready for finish and assembly are these hopper car hoods which have been through the shearing, pressing and punching operations. Another example of the facilities available for standard or custom fabrication in our press shops.



• Center sills, stringers, cross bearers and other component parts are offered separately along with the completely assembled underframe.

THE STORY OF

PRESSED STEEL CAR COMPANY'S STANDARD PARTS PROGRAM

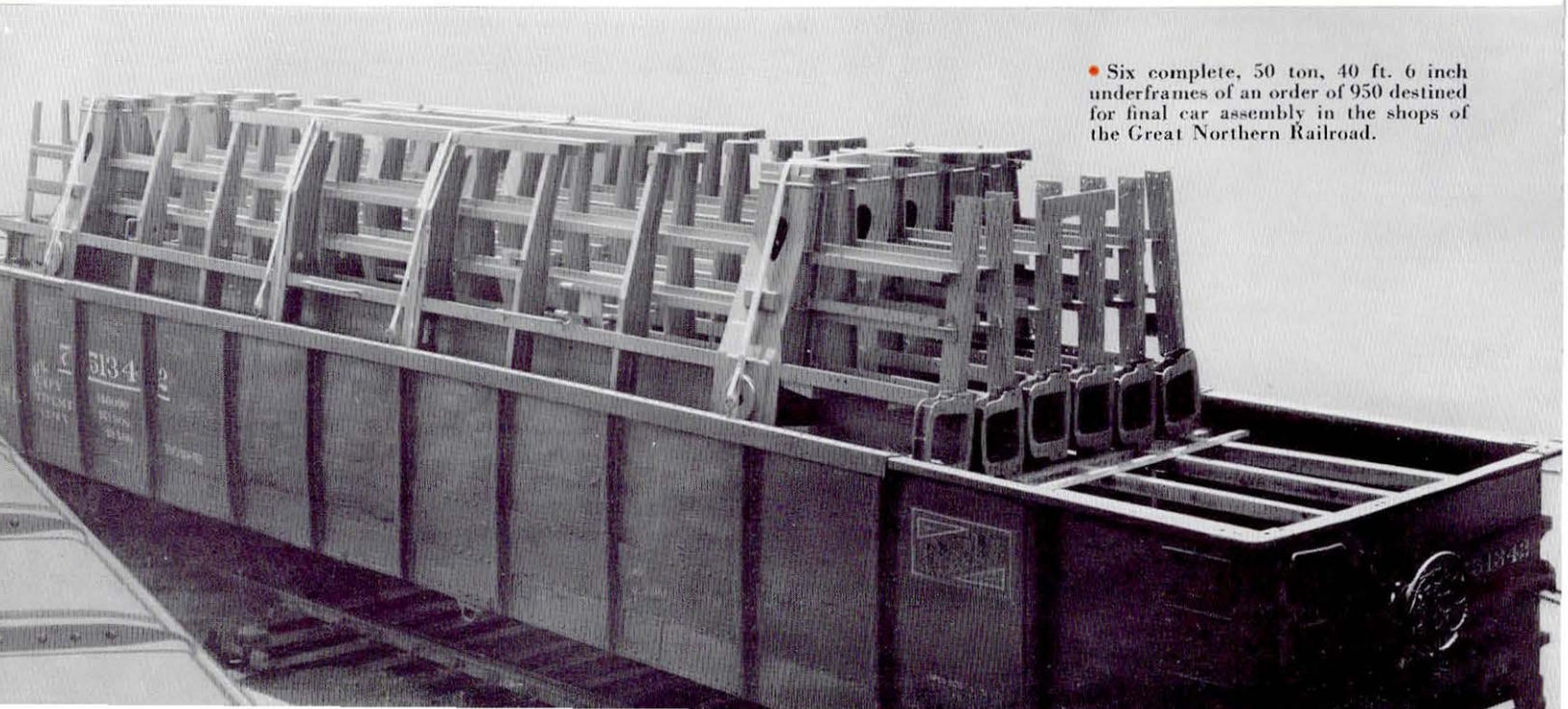
Pressed Steel Car is proud of its standard parts program which through the years, has become a "by-word" with many of America's railroads.

Each part, whether it be a forging, weldment, casting or pressing contributes to the overall strength, economy and efficiency of today's freight car. Engineering and metallurgical know-how are behind P.S.C's desire to supply the finest parts available from the smallest pin to complete underframes.

If your needs call for standard maintenance parts or complete car assembly in your shop we suggest that you inquire about PSC's program of supplying these parts more economically. Save time and money by writing today for further information on Pressed Steel Car Company's full production facilities.

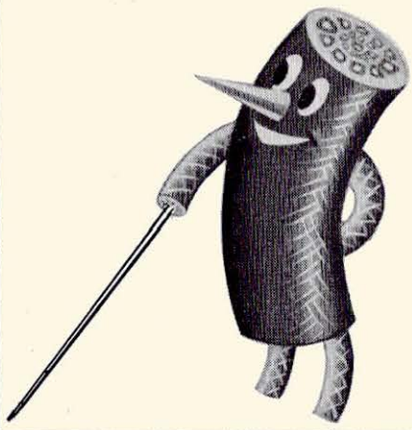
PRESSED STEEL CAR COMPANY, INC.

6 North Michigan Avenue • Chicago, Illinois



• Six complete, 50 ton, 40 ft. 6 inch underframes of an order of 950 destined for final car assembly in the shops of the Great Northern Railroad.

DAYS KERITE



97 YEARS salute a century

A CENTURY OF SERVICE

1852 • Rock Island Lines • 1852

It is a genuine and long-awaited pleasure to extend to the Chicago, Rock Island & Pacific Railway Co. and its legions of employees our heartiest congratulations upon its entry into the distinguished circle of railroad centenarians.

We shall be gratified indeed if, three years hence, our own centenary is as distinguished by maturity of experience, youthfulness of thought, and abundant accomplishment as is the first 100 years of the famous Route of the Rockets.

DAYS KERITE

KERITE CABLE

Kerite Insulation—Your Cable's Best Life Insurance

Congratulations

A CENTURY OF SERVICE
1852 · Rock Island Lines · 1952

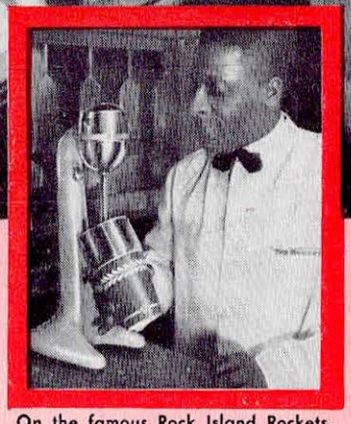
INLAND STEEL COMPANY
38 South Dearborn Street
Chicago 3, Illinois

Sales Offices: Chicago, Milwaukee, St. Paul, Davenport, Kansas City, St. Louis, Indianapolis, Detroit, New York

Dear Rock Islanders:
Your "Rockets" symbolize the progress of the Chicago, Rock Island and Pacific Railroad in helping to build the West.
Today, we're happy that we've been a partner with you for so many years in providing Inland steel to keep those "Rockets" rolling.
Sincerely,
Your Inland neighbors.
INLAND

LILY PAYS BIG DIVIDENDS TO THE ROCK ISLAND

These Rocket passengers are being served in handsome Lily Mixrite dishes and cups. Besides improving the appearance of foods and drinks, Lily service requires a minimum of storage space and no washing.



On the famous Rock Island Rockets, many drinks are mixed right in the Lily cup they'll be served in.

Quality food service in dining cars can be a headache, and with today's rising costs of help, utensils and overhead, it's getting worse. But there's a cure . . . handsome, practical Lily* service.

First of all, it's a fact that people *prefer* paper. According to a nine city survey made by Fact Finders' Associates, 70.2% of those expressing an opinion said they would rather be served in paper in public places. In Washington, D. C., 83% preferred paper!

Over and above paper's popularity, Lily brings beauty, efficiency and economy to dining cars. Many foods can be pre-portioned, or even baked and served right in the same Lily container! There's a Lily for many dining car, club and lounge car uses, and they're attractive, sturdy . . . and *disposable*.

Right now, the Rock Island is using Lily cups on the famous Rockets . . . a service that is modern, sanitary and completely individualized . . . economical too. This trend bears your personal investigation. Just drop a line to Lily for samples and complete details.

On the Rock Island Rockets you will be served the following food and drink items in Lily Cups — direct from dispenser to user:

Fruit juices
Water or milk
Iced tea and other cold beverages
Salads and desserts
Cream, syrup, jellies and jams
Milk drinks and malteds

LILY-TULIP CUP CORPORATION

122 EAST 42nd STREET, NEW YORK 17, NEW YORK

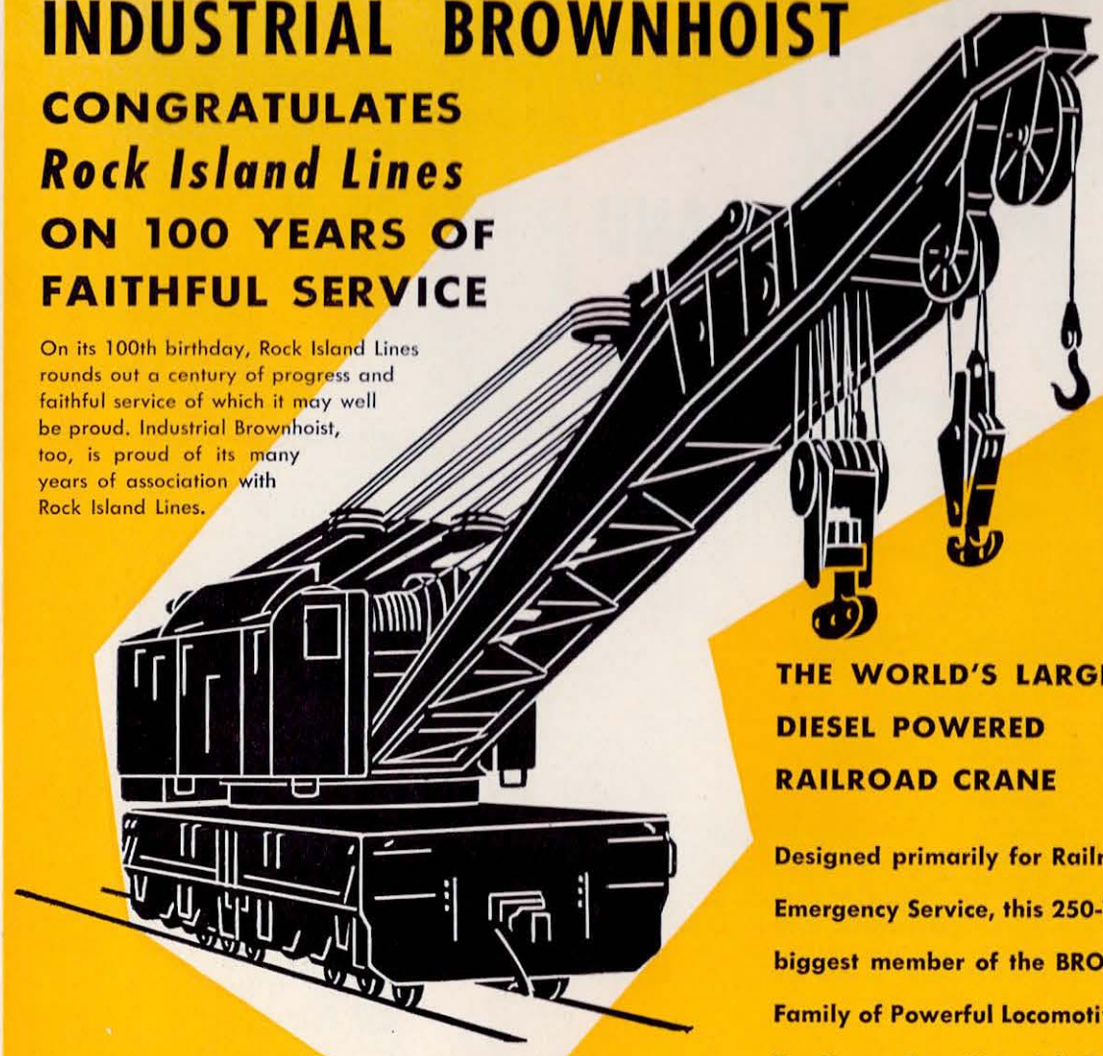
Chicago • Kansas City • Los Angeles • San Francisco • Seattle • Toronto, Canada

* T.M. Reg. U.S. Pat. Off.

INDUSTRIAL BROWNHOIST

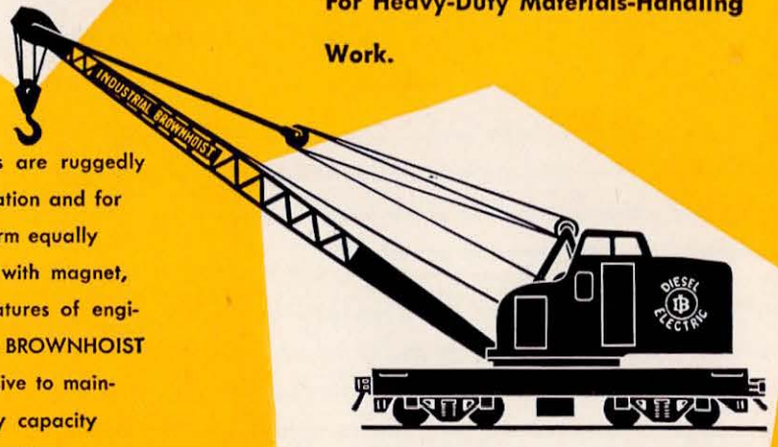
CONGRATULATES *Rock Island Lines* ON 100 YEARS OF FAITHFUL SERVICE

On its 100th birthday, Rock Island Lines rounds out a century of progress and faithful service of which it may well be proud. Industrial Brownhoist, too, is proud of its many years of association with Rock Island Lines.



THE WORLD'S LARGEST DIESEL POWERED RAILROAD CRANE

Designed primarily for Railroad Emergency Service, this 250-Ton Crane is the biggest member of the BROWNHOIST Family of Powerful Locomotive Cranes For Heavy-Duty Materials-Handling Work.



Brownhoist Diesel Locomotive Cranes are ruggedly built for continuous, heavy-duty operation and for long, dependable service. They perform equally well as switch engine or crane and with magnet, hook or bucket. Many advanced features of engineering design and construction make BROWNHOIST Cranes easy to operate and inexpensive to maintain. Standard models to meet every capacity requirement. Write for complete information.

BROWNHOIST builds better cranes

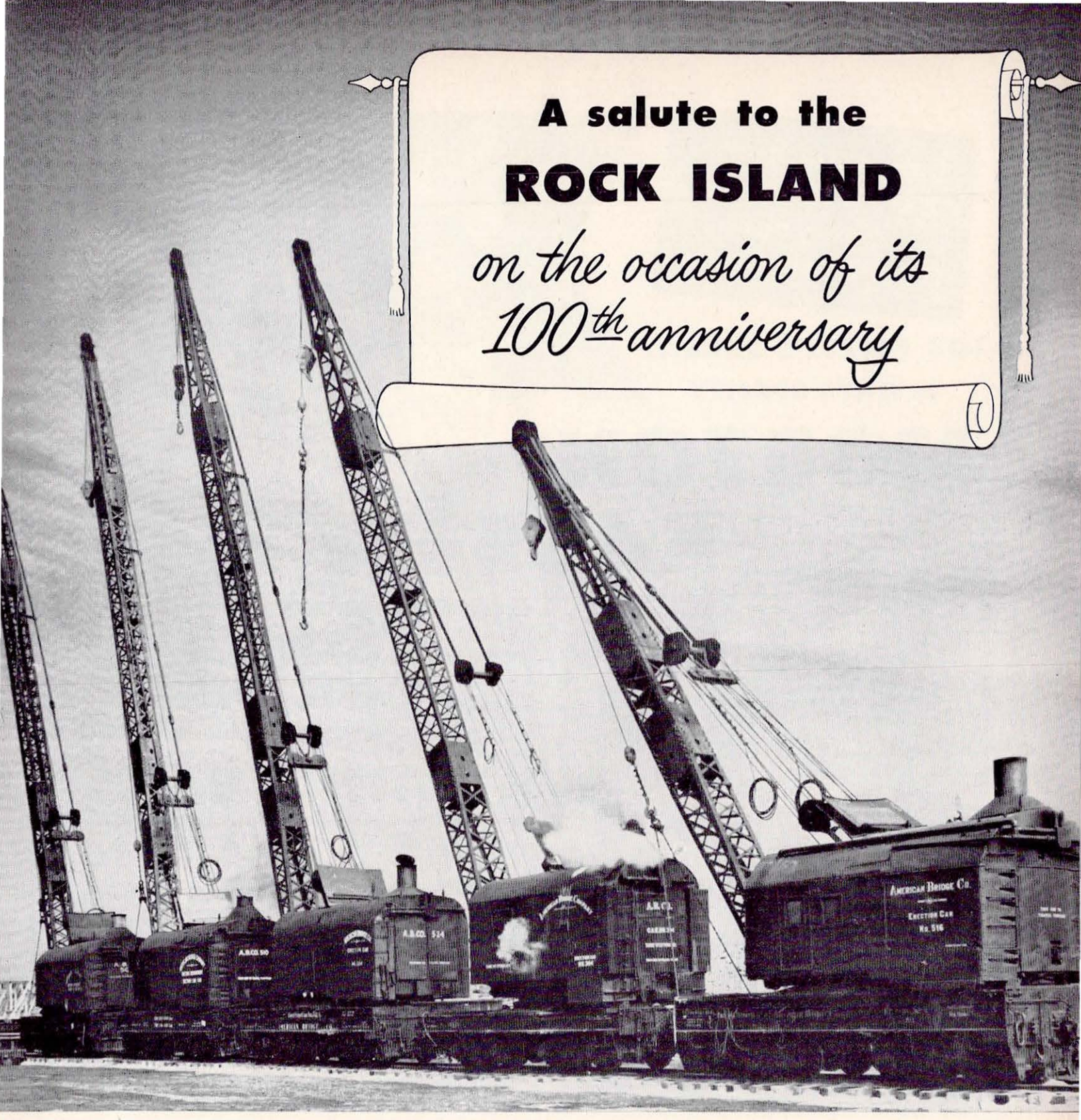
CLAMSHELL BUCKET

COAL-ORE BRIDGE

CAR DUMPER

INDUSTRIAL BROWNHOIST CORPORATION, BAY CITY, MICHIGAN • DISTRICT OFFICES: New York City, Philadelphia, Cleveland, San Francisco, Chicago; Canadian Brownhoist Ltd., Montreal, Quebec • **AGENCIES:** Detroit, Birmingham, Houston, Los Angeles.

158-A



AMERICAN BRIDGE heartily congratulates this important railroad on reaching the century mark!

Though only half as old ourselves, we know the satisfaction the Chicago, Rock Island and Pacific Railroad Company must feel from having contributed so immeasurably to the tremendous development of the area it has served so well through the years.

It has been a privilege for American Bridge to have participated in the Rock Island's expansion and modernization by fabricating and erecting many of the bridges along its lines. May the years ahead see a continuation of the progressive spirit that has made the Rock Island truly one of America's great transportation systems!

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL COMPANY
GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

Contracting Offices in: AMBRIDGE · ATLANTA · BALTIMORE · BIRMINGHAM · BOSTON
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USS TRADE MARK

AMERICAN BRIDGE

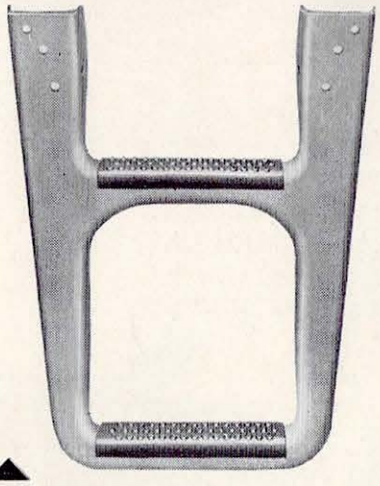
UNITED STATES STEEL

Congratulations, ROCK ISLAND —on your 100th Anniversary!

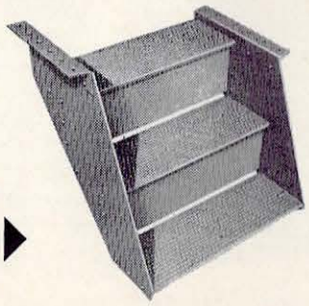
BUTTONS STAY SHARP
Button edges are constantly sharpened through wear and are thus able to present a sure, gripping surface at all times.

FOR SAFETY'S SAKE... ALWAYS SPECIFY

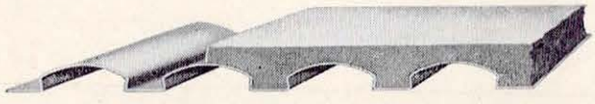
MORTON KASS Safety Treads



Locomotive stirrup steps may be made safe permanently with Morton Kass Safety Treads. Perforated buttons provide ever-sharp footage.



Kass Safety Treads are furnished as an integral part of Morton Step Flights; also, they can be provided separately for attachment by car builders or railroads who make their own step sides.



Morton "Chanarch" Steel Flooring is the ideal support for composition flooring. Narrow dovetail sections serve as anchorage for floor composition. Arches, designed for maximum load-carrying ability, reduce the amount of top surfacing needed. Choice of metals and gauges.

CHECK THESE FEATURES

SELF-SHARPENING PERFORATED BUTTONS. Non-dulling feature (see diagram above) means positive, lasting protection against accidents—a sure foothold in all directions, in any kind of weather.

DURABILITY. Fabricated of mild steel, stainless or other alloy steels, or aluminum. Same thickness of metal at top of safety buttons as in flat surfaces between. This means longer life!

VERSATILITY. Available in practically any shape for replacements and new installations—may be self-supporting or fastened to existing surfaces. Smooth flange margins as desired. Available with flared nosings and with any number of flanges as specified.

ECONOMY. Morton Kass Safety Tread is lower in cost, lighter in weight and wears longer. Also easier to install; no maintenance problem.

MORTON MANUFACTURING COMPANY
5125 West Lake Street, Chicago 44, Illinois

MAKERS OF: OPEN-GRIP RUNNING BOARDS AND BRAKE STEPS • KASS SAFETY TREAD • VESTIBULE DIAPHRAGMS AND CURTAINS • METAL DOORS • STEEL FLOORING . . . AND A WIDE LINE OF PRODUCTS FOR RAILROAD USE.

Standard

Congratulations...

...To President J. D. Farrington, his officers and organization, on the celebration of the One Hundredth Birthday of the "Route of the Rockets".

Standard
RAILWAY EQUIPMENT MANUFACTURING COMPANY

310 SOUTH MICHIGAN AVENUE, CHICAGO 4 • 247 PARK AVENUE, NEW YORK
HOBART BUILDING, SAN FRANCISCO • FIRST NATIONAL BANK BUILDING, ST. PAUL

THE WORLD'S LARGEST FABRICATOR OF RAILWAY CAR SPECIALTIES

NOW! Get the Book That Protects the Money You Invest in Diesels

DIESEL-ELECTRIC LOCOMOTIVE HANDBOOK

By GEORGE F. McGOWAN Technical Consultant

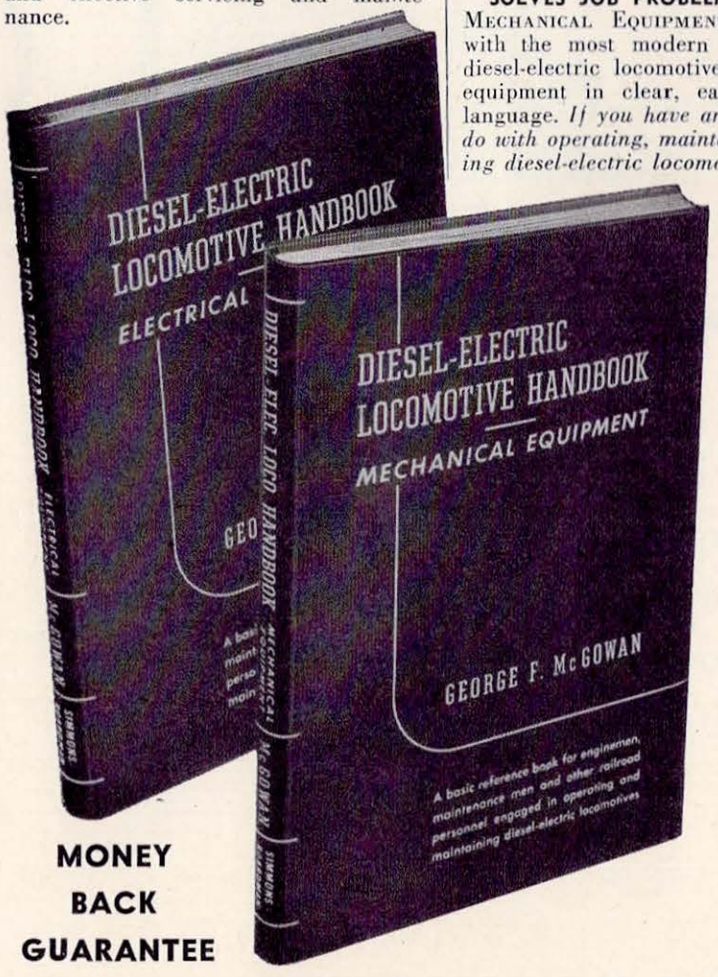
SEND TODAY for this great new book! Packed with photos and diagrams, it brings you up-to-the-minute facts — *the latest available* on diesel-electric locomotives and equipment.

Here is everything you need and want to know—*written from the viewpoints of the men in the cab and the shop*—by an experienced railroad man—*all checked and approved by the leading locomotive builders.*

For your convenience this handbook is sold separately in two volumes: *Mechanical Equipment and Electrical Equipment.* Read the descriptions that follow and you'll agree: *Here is essential information you cannot afford to be without!*

MECHANICAL EQUIPMENT

Everything necessary to complete understanding of diesel-electric locomotives is included—how diesel-electric locomotives are constructed, the reasons behind their design, proper operating methods, things that can go wrong with them, "trouble-shooting," and effective servicing and maintenance.



MONEY BACK GUARANTEE

GIVES YOU DETAILS OF EACH PART

Among the chapters are: The Development of the Diesel-Electric Locomotive; Fundamentals; Lubricating and Cooling; Fuel System—Fuel; Pistons, Piston Rings, Liners; Connecting Rods, Bearings, Crankshafts; Valves, Timing, Heads; Governors, The Steam Generator; The Air Compressor; and The Gas Turbine Locomotive.

DESCRIBES LOCOMOTIVES BY MAKE

Separate chapters are devoted to accounts of diesel engines made by The American Locomotive Company, Baldwin Locomotive Company, Electric-Motive Diesel, Fairbanks, Morse & Company, and Lima-Hamilton Corporation. Each engine, its parts, and its non-electrical auxiliaries are described and illustrated in full detail.

SOLVES JOB PROBLEMS FOR YOU

MECHANICAL EQUIPMENT provides you with the most modern information on diesel-electric locomotives and auxiliary equipment in clear, easy-to-understand language. *If you have anything at all to do with operating, maintaining or servicing diesel-electric locomotives,* you'll use this book as a handbook to help you solve problems that you meet in your daily work, and as a reference to keep you on top of developments in this expanding field.

ELECTRICAL EQUIPMENT

You get full descriptions of all major pieces of electrical equipment and all their parts: how they are constructed, how to operate them, how to take care of them and how to fix them if they go wrong.

There are chapters on: The Electric Generator; The Traction Motor; Exciters, Auxiliary Generators, Motor Blowers, Dynamic Braking; Batteries; and Contactors.

DETAILS EQUIPMENT BY MAKE

The electrical and control equipment of the major builders: Alco-G.E., Electro-Motive Division, Lima-Westinghouse, Baldwin-Westinghouse, and Fairbanks, Morse-Westinghouse is completely analyzed in individual chapters.

You need only a layman's knowledge of electricity to gain the utmost benefit from this book—because the subject is presented in *practical language* by an experienced railroad engineer.

ANALYZES ELECTRICAL SET-UP

You learn why the electrical transmission has been adapted to the diesel locomotive; its advantages, disadvantages and limitations. You get a review of electrical fundamentals; definitions of terms and explanations of how to use the most common electrical formulas. Schematic wiring diagrams are explained and their special symbols identified.

EXPLAINS OPERATION, SERVICING, MAINTENANCE

Yes, *here is your opportunity to gain a complete understanding of the electrical equipment of today's diesel-electric locomotives,* to learn how to handle, service and maintain the equipment.

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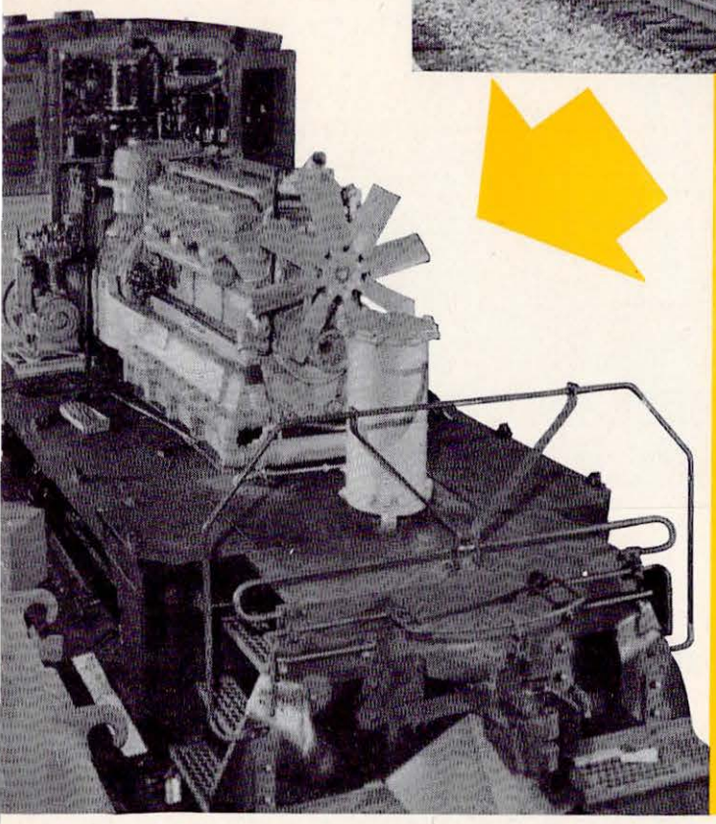


1,000 dual-engine horsepower

... instantly available ... centrally controlled ... quality engineered

Here shown are the first and second of two Rock Island 110-ton Davenport locomotives—each powered with two of the big 500-horsepower "Caterpillar" D397 Railroad Diesel Engines.

Already these yard and road locomotives have behind them ample hours of operation to prove their easy control, their power to handle up to 100 cars on the hump, and their thorough dependability for long stretches of high-availability operation.

There is no reason to expect anything less from these engines than has been recorded by the thousands of smaller "Cat" Diesels used for years on 90% of the 44-tonners working on Class I, II and III roads throughout the Western Hemisphere . . . because these models are made from the same "cloth" and with the same "tailoring"—under the same principles of construction, by the same engineering, and with the same high-quality materials. They are compact, rugged and long-lived, and readily accessible for servicing and parts replacements. What's more, "Caterpillar" Dealers are well equipped for rebuilding working parts before they are worn beyond repair. *Good care and maintenance are good preventive medicine.*

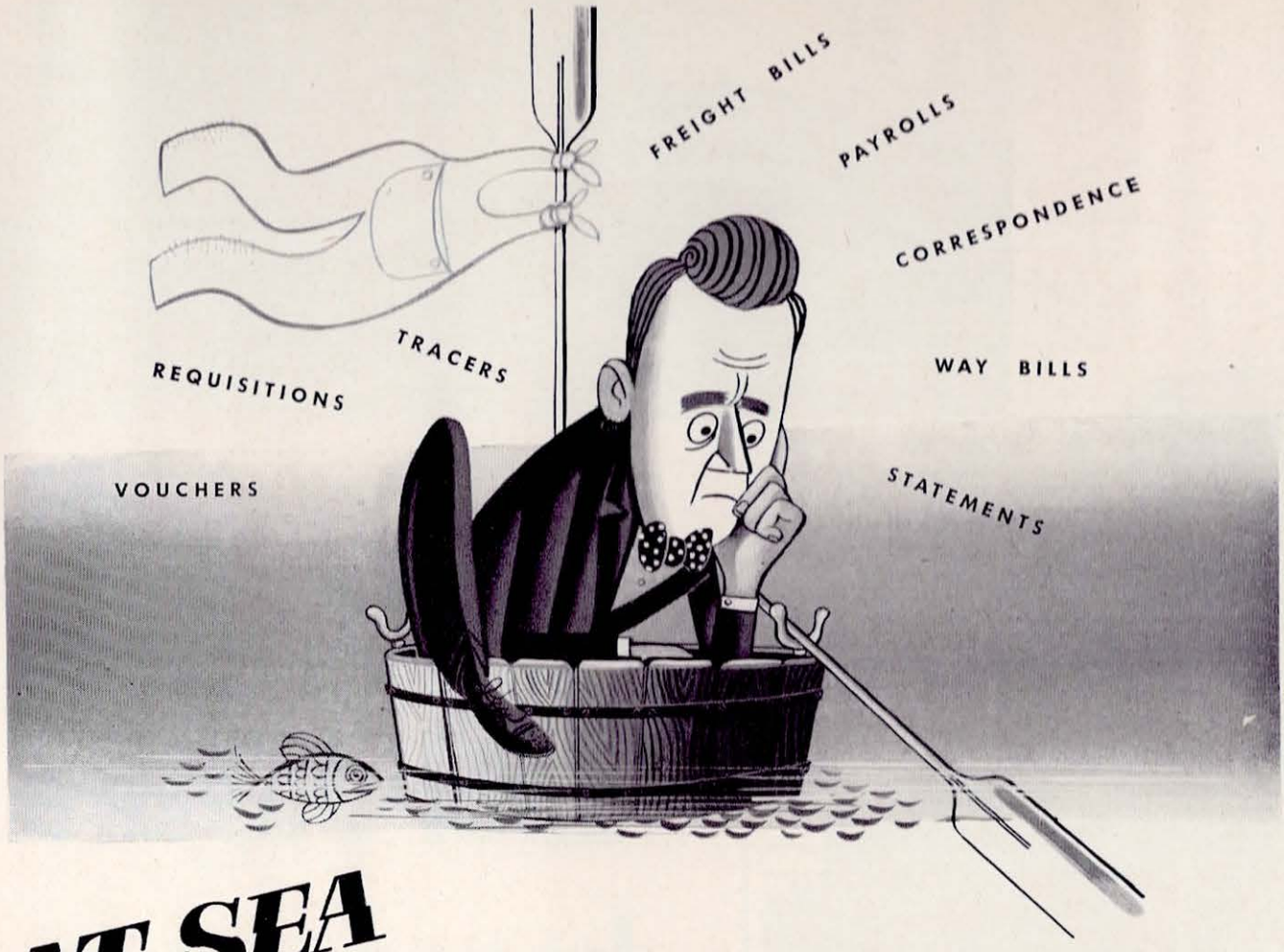
Operators, shop foremen and yard superintendents are enthusiastic about these big Diesels. "Caterpillar" will be glad to give railroad managements further information on their job performances to date.

CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS

CATERPILLAR

REG. U. S. PAT. OFF.

Railroad Diesels



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Congratulations!

Rock Island

1852 — A Century of Progress — 1952

Typical of how the American railroads have aided nation-wide expansion and welfare—Rock Island's achievements have been recorded for 100 years. "National" takes pride in having served them during most of that impressive period.

With further "on-rail" advancements and for Rock Island's planned progress, National's continued service and forward development can be depended upon.

For railroads' benefit—comprehensive development work and testing will be centralized in National's new Engineering Laboratory and Outdoor Proving Ground. This includes programs involving cars, under impact, on test tracks.

85 years Service to Transportation
by 1953

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NATIONAL MALLEABLE and STEEL CASTINGS COMPANY
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NATIONAL Products FOR TRANSPORTATION AND INDUSTRY Est. 1868

COUPLERS • FREIGHT TRUCKS • YOKES • FRICTION AND RUBBER DRAFT GEARS • JOURNAL BOXES AND LIDS

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·EST·
1883

Congratulations

ROCK ISLAND

on your

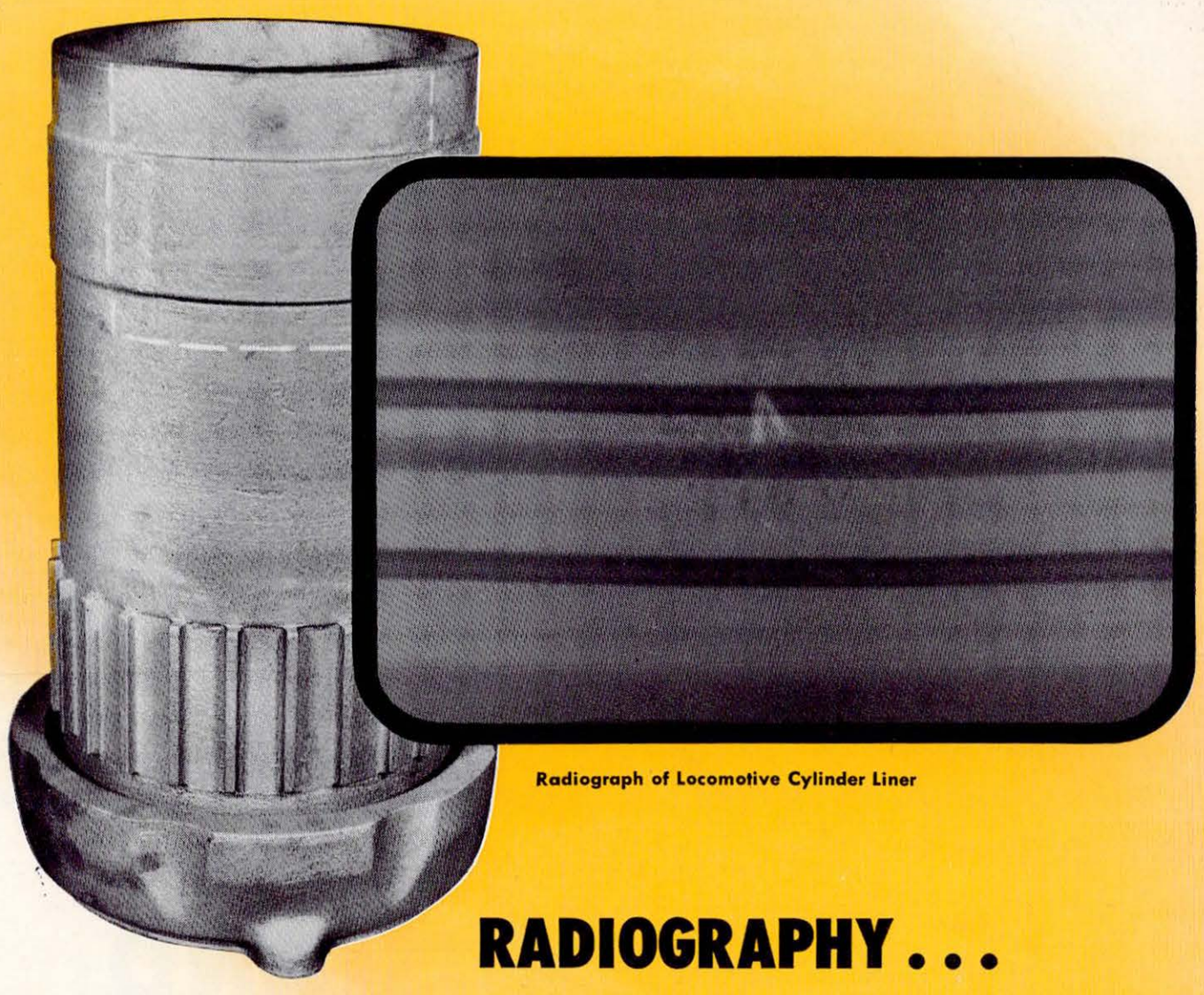
100th ANNIVERSARY!

It has been a privilege
to serve you
over the years.

Our company has not been in existence for 100 years—but with 69 years back of us—we also are on our way to the Century mark.

THE READE MANUFACTURING CO., INC.
Jersey City—Chicago—Kansas City—Minneapolis—Birmingham

WEED AND BRUSH CONTROL SERVICE



Radiograph of Locomotive Cylinder Liner

RADIOGRAPHY . . .
one factor in Diesel dependability

DIESEL LOCOMOTIVES take millions of miles of service in their stride. They've won the acclaim of roads and riders alike for their smooth speed and dependability.

Radiography does its share in this dependability. Such parts as the cylinder liner shown above are checked for subsurface faults that could cause breakdowns if undetected—or, if discovered during machining, cost valuable time.

More and more foundries make it a practice to radiograph their castings. It lets them know they release only high-quality castings. It frequently points the way to improved casting methods and increased yield in production runs.

You can find out how Radiography can improve operations in your plant by talking it over with an x-ray dealer. And you can send to us for a free copy of "Radiography as a Foundry Tool."

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To the ROCK ISLAND:

Congratulations!

THE RAIL JOINT COMPANY Inc.
50° CHURCH ST. NEW YORK 7, N. Y.

PEERLESS

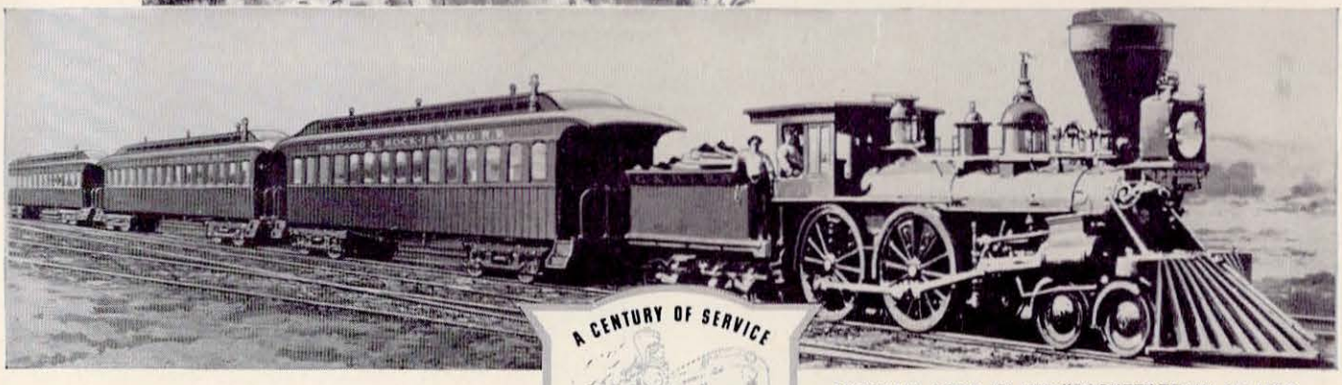
PROTECTION

Congratulations to the Chicago, Rock Island and Pacific Railroad Company on their 100th anniversary!

The Peerless Equipment Company extend their congratulations and are proud to share in this achievement by furnishing a device which has assisted them in maintaining their equipment at high standards for safe and speedy travel.

PEERLESS
EQUIPMENT COMPANY

332 SOUTH MICHIGAN AVENUE
CHICAGO 4, ILLINOIS



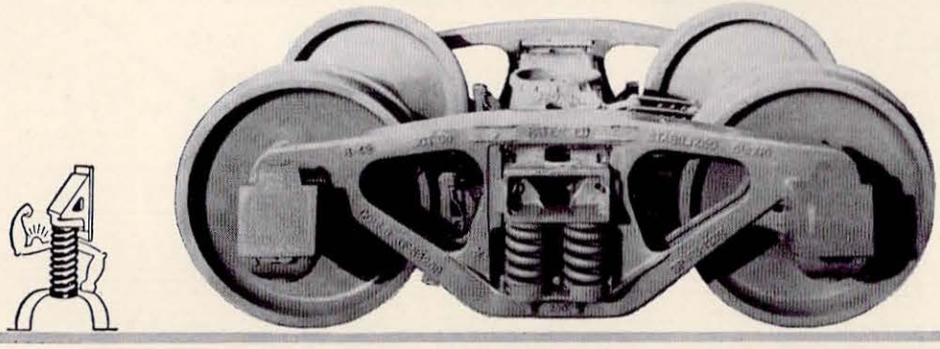
ORIGINAL ROCK ISLAND "ROCKET" TRAIN OF 1852

The Pioneers who planned the Rock Island Railroad over 100 years ago faced many difficult obstacles. Nearly three years elapsed before the initial capital of $300,000 was subscribed, and Henry Farnam, a noted railway builder, was employed to construct the railway. The first section of 181 miles from Chicago to Rock Island was completed on February 22, 1854.

Noted for its "Rocket" trains, the Rock Island today traverses nearly 8,000 miles of territory, bridging the Mississippi and Missouri Rivers on its way to the Pacific, a typical example of American enterprise.

Pioneering development of Barber Stabilized Trucks was a slow process too, as the merits of any new product must be proven before its adoption becomes general.

The efficiency of Barber Stabilized Trucks has been proven so conclusively that more than 100 American railways have purchased over 300,000 car sets of Barber Trucks.

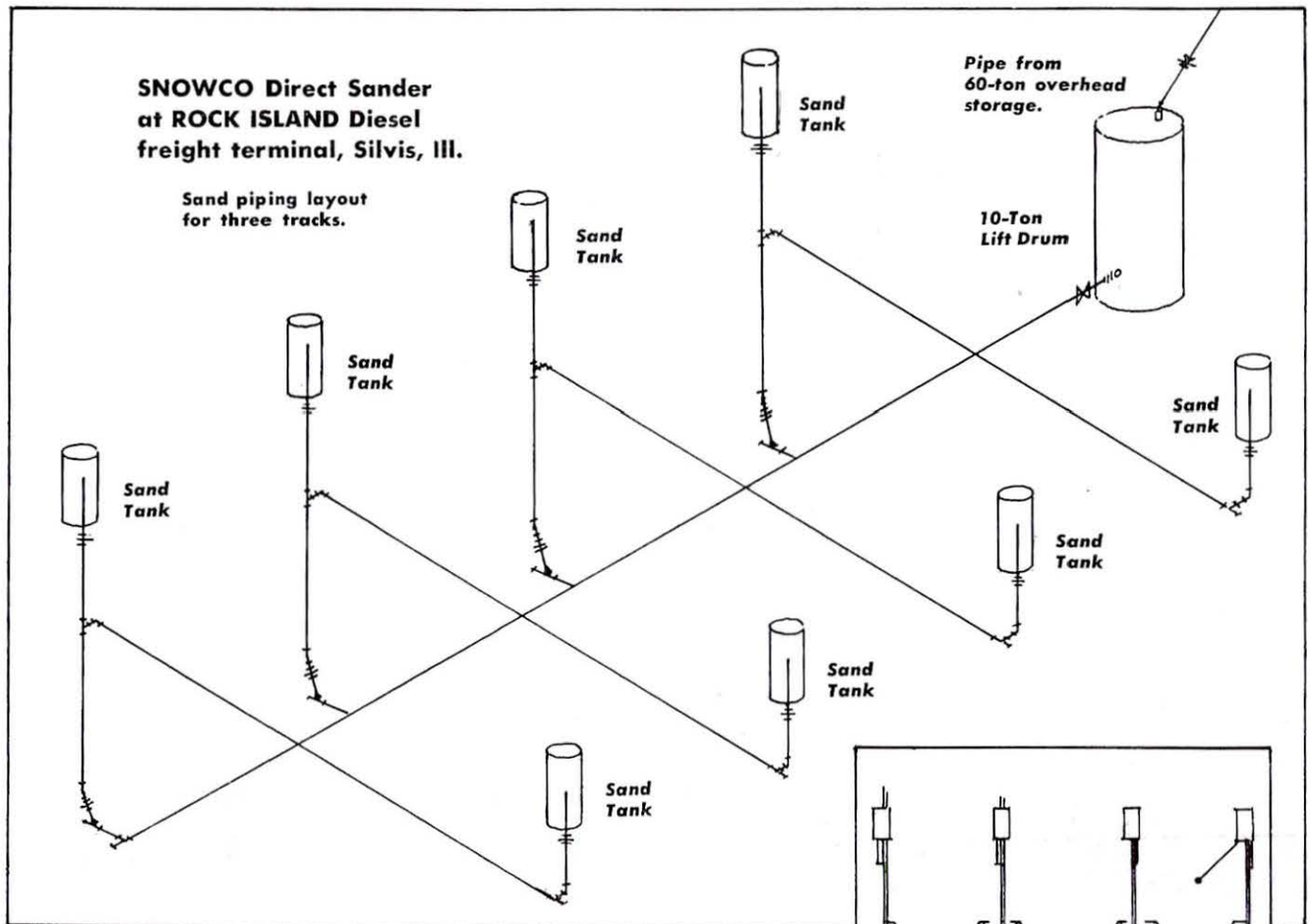


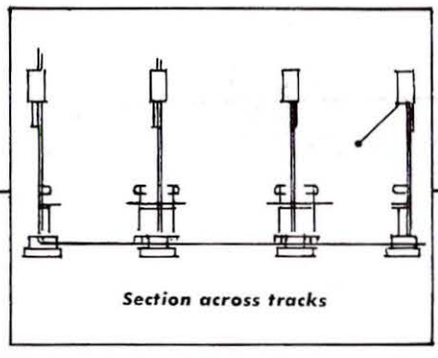
BARBER STABILIZED TRUCK

STANDARD CAR TRUCK COMPANY
332 SOUTH MICHIGAN AVE., CHICAGO, ILL.

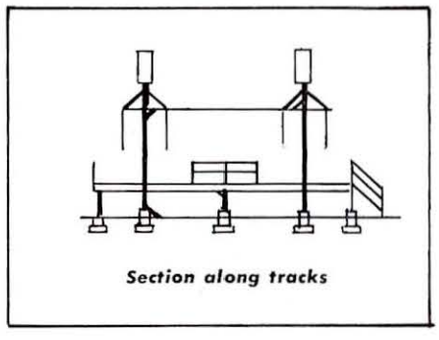
6091

SNOWCO Direct Sander at ROCK ISLAND Diesel freight terminal, Silvis, Ill.





Section across tracks



Section along tracks

New type sanding facility using SNOWCO "Direct Sanders." All sand moves under reduced pressure, at ground level, through valveless pipe system to direct sanders, open to the atmosphere, from which it drops by gravity through the fill-hoses to the engines.

SALUTING the Rock Island's successful century of railroading, we are glad to have enjoyed more than 40 years' continuous co-operation with this great system, supplying service facilities for its locomotives. Through these years we have always found Rock Island men progressive-minded and alert to new ideas in the servicing field, — they pioneered, in fact, in the designing of equipment for the use of pre-dried sand. The newest Rock Island Diesel service facility, part of a large freight terminal just being completed at Silvis, Illinois, incorporates the radically new sanding device described here, using SNOWCO "Direct Sanders."

ADVANTAGES

- **Low first cost, because of the small, light-weight structures; no expensive foundations**
- **Can be relocated, with possible re-use of flat slab foundations.**

Pats. pending.

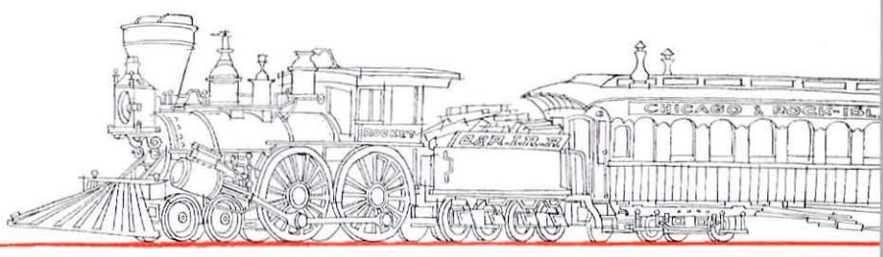
T. W. SNOW CONSTRUCTION CO.

9 So. Clinton St., Chicago 6, Ill.

SNOWCO Sanders are individually designed to serve specific requirements

645
Rock Island
A CENTURY OF SERVICE
1852 · Rock Island Lines · 1952

WONDERFUL WAY TO CELEBRATE A BIRTHDAY



HIGH on any list of America's crack trains are the Rock Island Rockets. These speedy streamliners have built an enviable reputation for fast, dependable service over the last century.

It was 100 years ago this month that the first Rock Island train—even then called "The Rocket"—was dispatched on its run from Chicago to Joliet. Today, Rockets traverse the Rock Island's routes, running through 14 states in America's heartland, hauling products from mine and mill, forest and farm to the nation's markets.

In 1937, two General Motors Diesel locomotives went into Rocket Service. The Peoria Rocket and Des Moines Rocket were the first of these crack trains to be pulled by General Motors Diesels. Since that time, more and more GM Diesels have gone to work for the Rock Island until today there are 291 of these units in freight, passenger and switching service.

In the 1951 Annual Report, President J. D. Farrington said: "In keeping with our program of progress, we have made great strides toward plant and equipment improvement. Our complete dieselization is in sight — — —."

Complete dieselization in sight on its 100th Anniversary—certainly a wonderful way to celebrate a birthday.

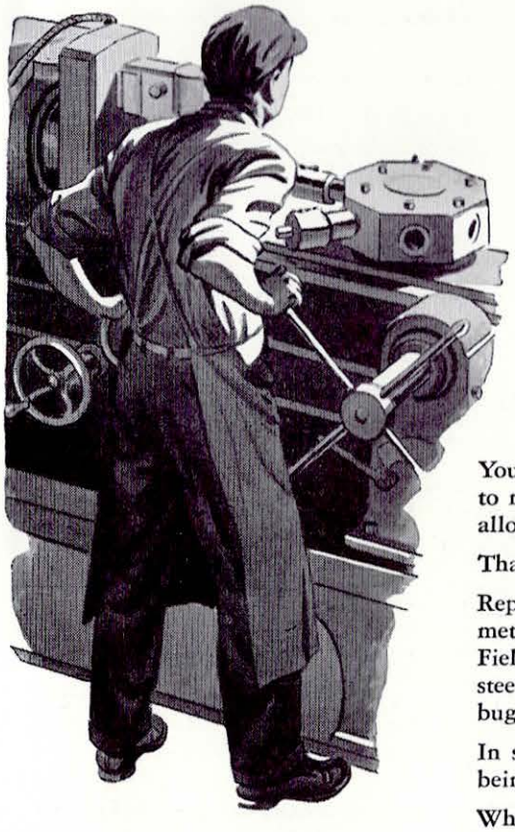
Electro-Motive Division congratulates the Chicago, Rock Island and Pacific Railroad on its 100th Anniversary and extends best wishes for many happy returns.

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS

GENERAL MOTORS LOCOMOTIVES

La Grange, Ill., Home of the Diesel Locomotive • In Canada: GENERAL MOTORS DIESEL, LTD., London, Ont.

a few words about alloy steels



and how we can help you switch to ALTERNATE ALLOY GRADES

You've probably had trouble getting the alloy steels you've been accustomed to running. You've got the headache of choosing the best available alternate alloys, plus the headaches of how to machine and heat-treat them.

That's where we can help . . .

Republic 3-Dimension Metallurgical Service combines the experience of your metallurgist and your production men with our 3-man team . . . the Republic Field and Laboratory and Mill Metallurgists. You tell us what you want the steel to do . . . we tell you the best available alternate, help you take the bugs out of using it.

In spite of restrictions you can probably switch to one of the many grades being made by Republic . . . world's largest producer of alloy and stainless steels.

When may our Republic Field Metallurgist call?

REPUBLIC STEEL CORPORATION
Alloy Steel Division • Massillon, Ohio
GENERAL OFFICES • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, N.Y.

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3-DIMENSION Metallurgical Service

Republic REPUBLIC STEEL ALLOY STEELS

Other Republic Products include Carbon and Stainless Steels—Sheets, Strip, Plates, Pipe, Bars, Wire, Pig Iron, Bolts and Nuts, Tubing

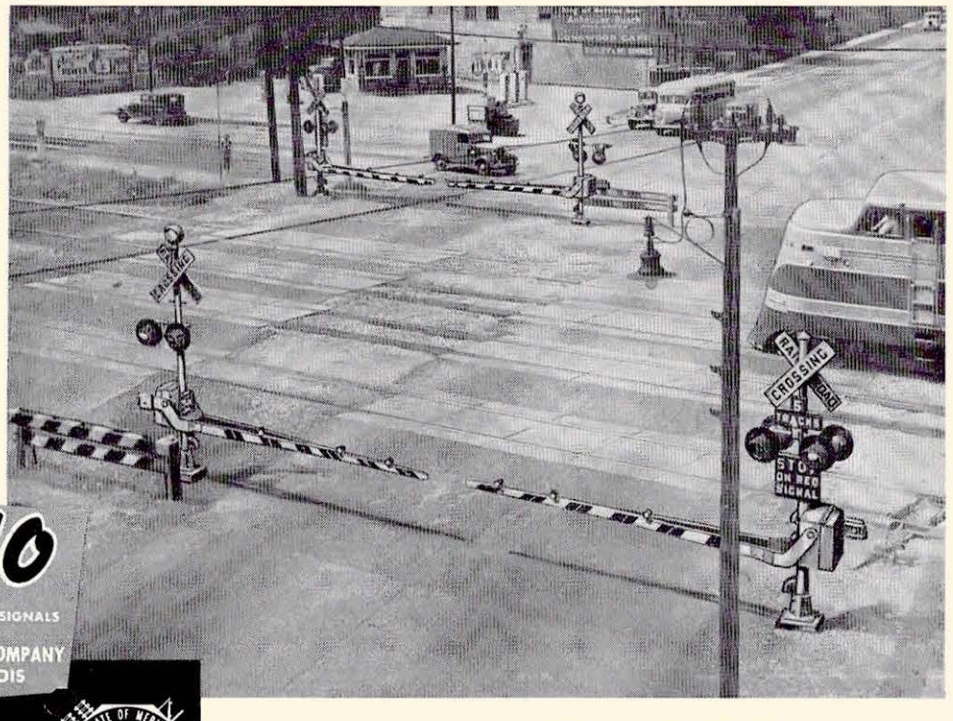
SAFETY KEEPS PACE WITH SERVICE ON THE ROCK ISLAND

As we of WRRS review your history of service to the American public, we observe with interest your relentless campaign for safety in all phases of operation. And it is particularly gratifying to us to recall that the Rock Island was one of the first railroads to use our Model 10 Automatic Signals as a means to accident prevention at railroad-highway crossings.

Records show that along the route of the famous Rockets, a total of 725 crossings are guarded by various forms of automatic protection. And of this number, 233 are made safe 24 hours a day by WRRS Model 10's. In the congested areas between Chicago and Joliet, Illinois, and between Gresham and Blue Island, Illinois, a total of 63 crossings have automatic protection, 40 of them guarded by Model 10 Signals.

May you always rank among the first in the practice of "Safety First."

WESTERN RAILROAD SUPPLY CO.
2428 S. Ashland Ave., Chicago 8, Illinois



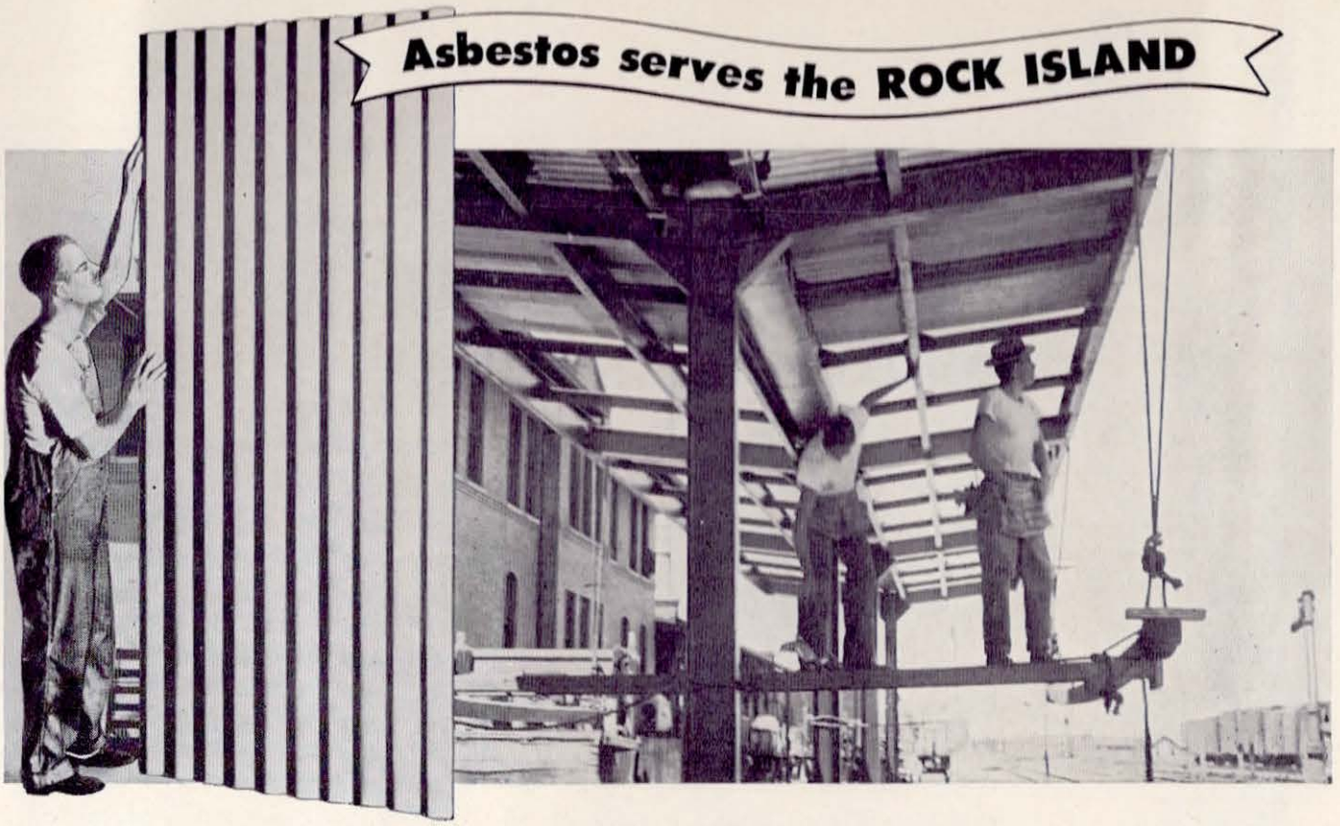
Model 10 installation on the C.R.I.&P. at 95th St., Chicago. Unusually heavy traffic (120 trains, 35,000 to 40,000 vehicles per day) give these signals the acid test for safety and efficiency. Record? Not a single fatality has occurred since installation in 1937.

Model 10

AUTOMATIC GRADE CROSSING SIGNALS
PRODUCT OF
WESTERN RAILROAD SUPPLY COMPANY
CHICAGO 8, ILLINOIS

LEADING MANUFACTURER OF GRADE CROSSING SAFETY DEVICES—MAKER OF RAILWAY SIGNALING ACCESSORIES

CERTIFICATE OF MERIT for Safety AWARDED TO WESTERN RAILROAD SUPPLY CO.



Fireproof and weatherproof walls and roofs *built quickly and economically with*

J-M Corrugated Transite*

ON RAILROAD AFTER RAILROAD across the country, Corrugated Transite is used for many types of construction, large and small, because of its versatility, its economy, and its ability to *last for years* without maintenance.

It is versatile because it can be used for roofing or siding on all types of construction—from a right-of-way building to a diesel shed or freight terminal. It is an architecturally attractive material that can be used with outstanding effect in conjunction with other materials, such as glass block, glass panes, or clay brick.

It is economical because it comes in large sheets that are easy to handle, and cover large areas with minimum framing. And, because it is virtually maintenance-free, it never requires painting or other treatment for preservation.

It will provide years and years of service, because this Transite pressure-moulded, asbestos-cement material is fireproof, corrosion-proof, weatherproof, and rotproof.

For more information write Johns-Manville, Box 60, New York 16, N. Y. In Canada: 199 Bay Street, Toronto 1, Ontario.

*Transite is a registered Johns-Manville trade mark.

This new Corrugated Transite train shed at Rock Island, Ill., was built to replace a wooden-roofed shed. Corrugated Transite was used for roofing. Note how the large sheets of Corrugated Transite are applied directly to the steel framing.

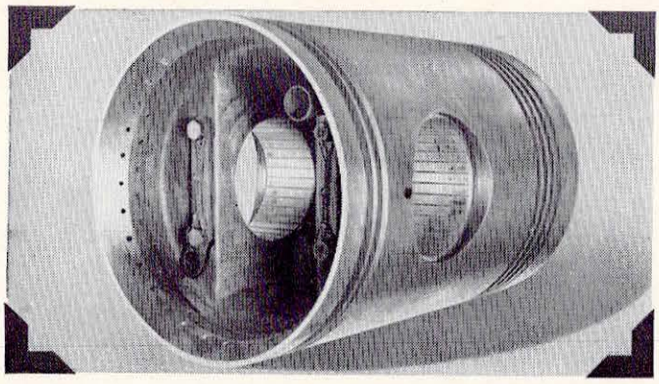
JOHNS-MANVILLE JM PRODUCTS **Johns-Manville** 94 YEARS OF SERVICE TO TRANSPORTATION

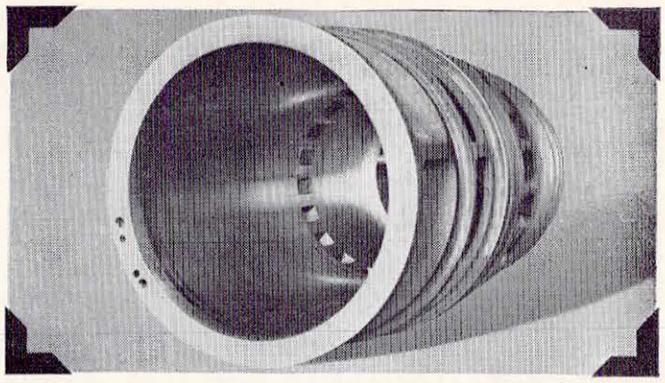
STANDARD ENGINEER'S REPORT

DATA

LUBRICANT RPM Delo Oil R.R.
UNIT Diesel Locomotive cylinder assembly
SERVICE Mountain Freight
LOCATION Transcontinental freight service on Moffat tunnel + Royal Gorge Routes
PERIOD In excess of 8 years
FIRM Denver + Rio Grande Western R.R.Co.

One million miles of service on cylinder liners and pistons





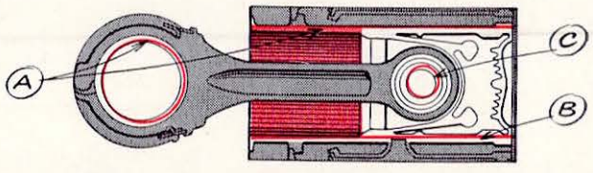
IN SERVICE APPROXIMATELY 1,000,000 MILES in Denver & Rio Grande Western Railroad diesel locomotive engines, this piston and cylinder liner were always lubricated with RPM DELO Oil R.R. At the end of that time wear measurements (inches) were only: Piston Skirt—0.001; Ring Grooves—No. 1—0.003 to 0.006, No. 2—0.002, No. 3 & 4—none; Cylinder liner (maximum diameter)—0.0095, (out of round)—0.002 to 0.004.

RPM DELO Oil R.R. has been the standard on the Denver & Rio Grande Western Railroad for over-the-road freight and passenger locomotives since their first power of this type was placed in service in January 1942. At the time this inspection was made approximately 49,563,104 miles had been traversed by the Rio Grande freight diesel fleet of 100 units and during that period only 77 cylinder liners had been scrapped for any reason. At that time many of the original pistons and cylinder liners were still in service and the average age of all these assemblies, including recently purchased power, was 4.7 years.

RPM DELO LUBRICATING OILS

TRADEMARK "RPM" REG. U.S. PAT. OFF.

How RPM DELO Oil R. R. prevents wear, corrosion, oxidation



A. Special additive provides metal-adhesion qualities...keeps oil on parts whether hot or cold, running or idle.

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C. Special compounds stop corrosion of any bushings or bearing metals and foaming in crankcase.

FOR MORE INFORMATION about this or other petroleum products of any kind, or the name of your nearest distributor handling them, write or call any of the companies listed below.

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Another Long-Wearing, Low-Maintenance, Luxurious Goodall Installation... The "Golden State"

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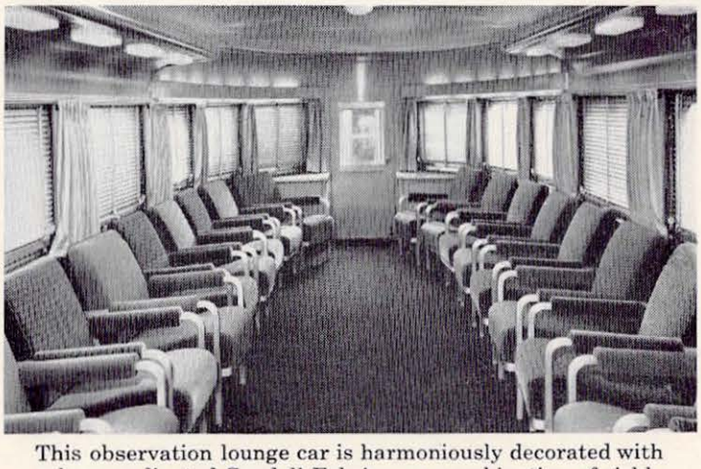
Elegance and durability are achieved in this deluxe coach with 100% Goodall Fabrics... upholstery, draperies, window shade facing and Seamloc* carpeting.



This observation lounge car is harmoniously decorated with color-coordinated Goodall Fabrics... a combination of richly textured upholsteries and wrinkle-resistant draperies.

For many decades Goodall's experience with transportation fabrics has helped the Rock Island Railroad maintain its record of outstanding service and economical operation. Like many leading railroads, Rock Island has proved the advantage of Goodall *Blended-to-Perform* Fabrics through constant use.

Goodall Fabrics INC.
THE FINEST NAME IN FABRICS

Where durability and luxury are the keynote—
Goodall Fabrics are preferred

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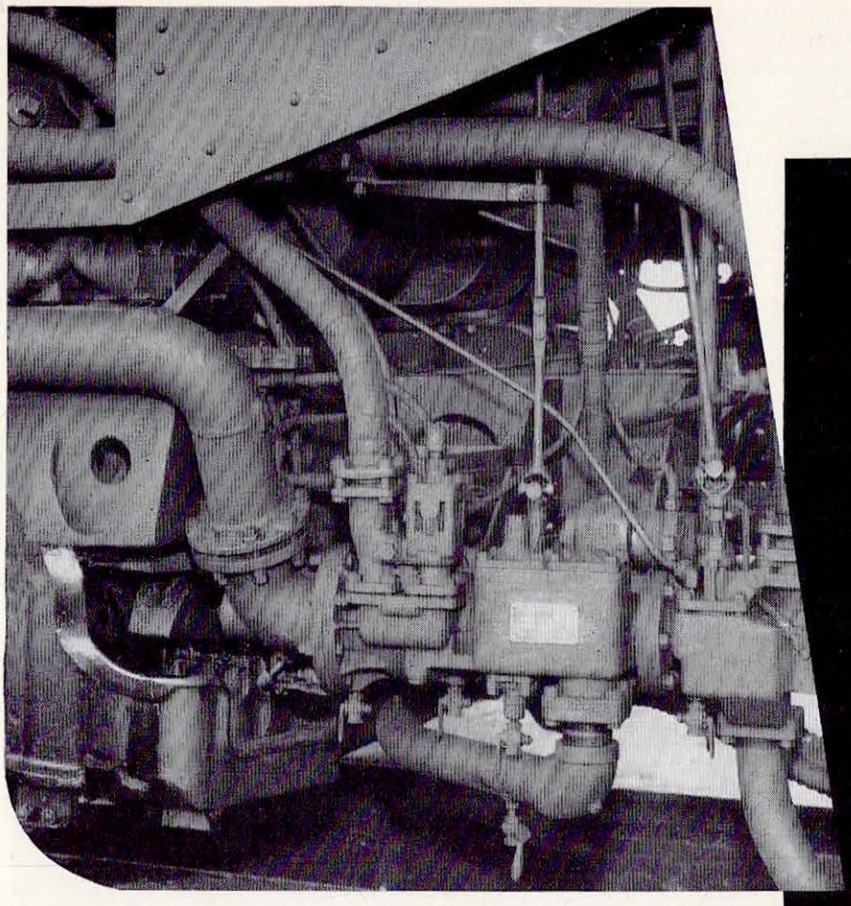

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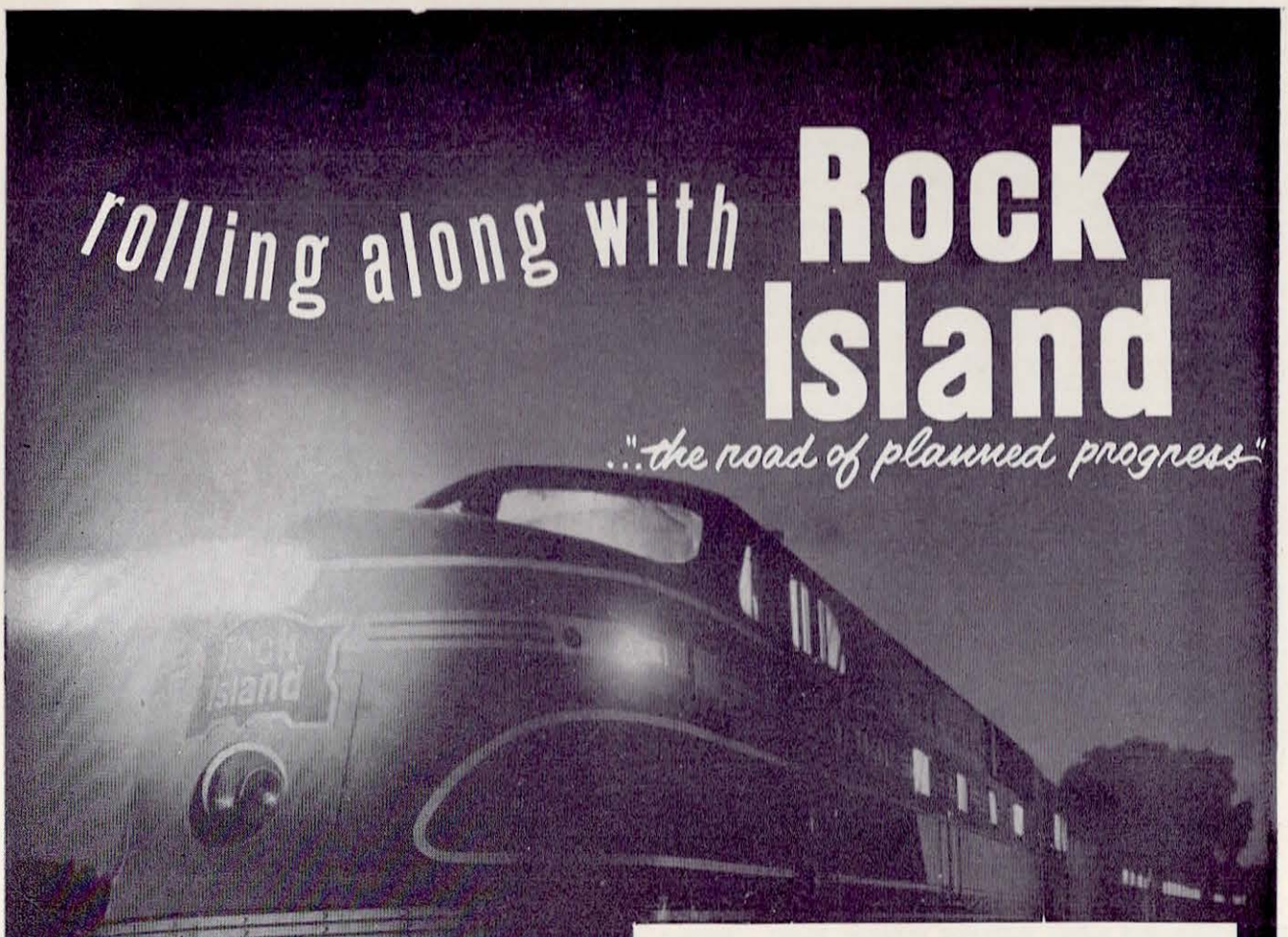

• Ever since 1936, Waukesha Ice Engines and Enginators have supplied Rock Island trains with constant, dependable air-conditioning and electric energy—winter or summer, day or night. Year after year the best testimonial—repeat orders!

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DIESEL ENGINATOR AC 33.75 KVA or DC 27 KW

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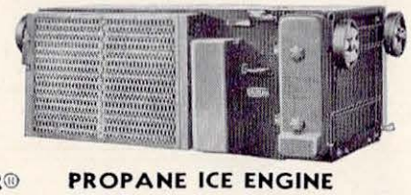
7.5 KW DC



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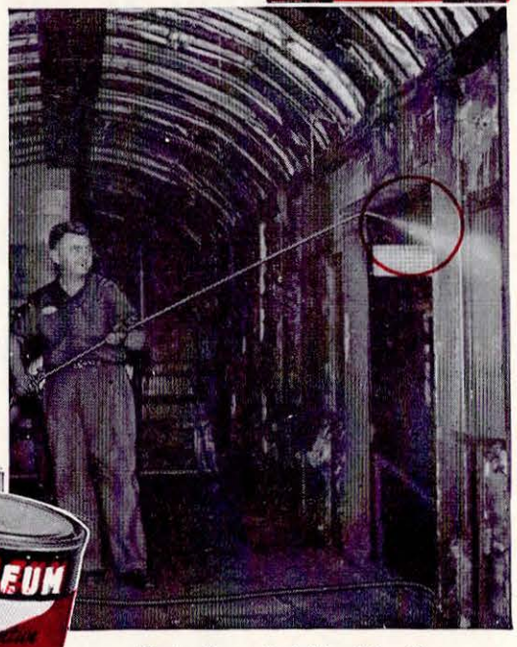

Photo shows Rock Island Car Shops using RUST-OLEUM to stop rust on car undergoing repairs.

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. . . with pride in our part in building the ROCK ISLAND into the great railroad it now is . . . pride in hundreds of bridges and culverts we have rebuilt or replaced, including major crossings of such rivers as . . .

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Bridges Railroad Construction Foundations Steel Erection

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Our very first Turbo-Generator went to the Rock Island in 1897

SINCE 1897

This great American railroad has continued to be one of our most valued customers ever since.

Therefore it is with particular pleasure that we offer congratulations to the Rock Island on 100 years of progress.

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HEADLIGHTS • GYRALITES • PLUGS & RECEPTACLES • ELECTRICAL FITTINGS AND EXPLOSION PROOF EQUIPMENT FOR DIESEL SHOPS • FLOODLIGHTS • MULTI-VENT AIR DISTRIBUTION

STANDARD HD
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. . . serves the railroad that

"rocketed" diesels to fame . . .

● The Rock Island's diesel powered Rocky Mountain Rocket, shown above, symbolizes the century of achievement which has earned for this railroad an enviable reputation for progressive service. A pioneer of railroad dieselization, the Rock Island has literally helped "rocket" the railroad diesel to fame.

A contributor to this railroad's outstanding record for diesel economy and efficiency is STANDARD HD Oil, Standard Oil's outstanding heavy-duty diesel lubricant. One of the first railroads to use STANDARD HD, the Rock Island has ample evidence of this lubricant's ability to provide effective lubrication.

Make this progressive railroad's acceptance of STANDARD HD the basis for trying STANDARD HD in your diesel locomotives. A Standard Oil Railway Department representative will be glad to help you. Standard Oil Company, 910 South Michigan Ave., Chicago 80, Illinois.

Rock Island

STANDARD OIL COMPANY STANDARD *(Indiana)*

TEXACO *Salutes the* ROCK ISLAND *on its 100th Anniversary*

This month the Chicago, Rock Island and Pacific Railroad Company completes its first "Century of Service" . . . and Texaco is happy to lead the chorus of congratulations to this fine, progressive road.

The men of Texaco and the Rock Island have worked closely together for many years. Texaco Systematic Engineering Service and Texaco Railroad Lubricants have played important parts in helping the Rock Island build its outstanding reputation.

Texaco Dieseltex HD for Diesel locomotive lubrication, for example. The Rock Island uses this great lubricating oil as do leading railroads everywhere. In fact —

More Diesel locomotives in the U. S. are lubricated with Texaco than with any other brand.

Famous Texaco Railroad Lubricants and Systematic Engineering Service are available in all 48 States. Use them to boost your road's efficiency. Just call the nearest Railway Sales Office in New York, Chicago, San Francisco, St. Paul, St. Louis or Atlanta; or write:

☆ ☆ ☆

The Texas Company, *Railway Sales Department,* 135 East 42nd Street, New York 17, N. Y.

NEW YORK
CHICAGO
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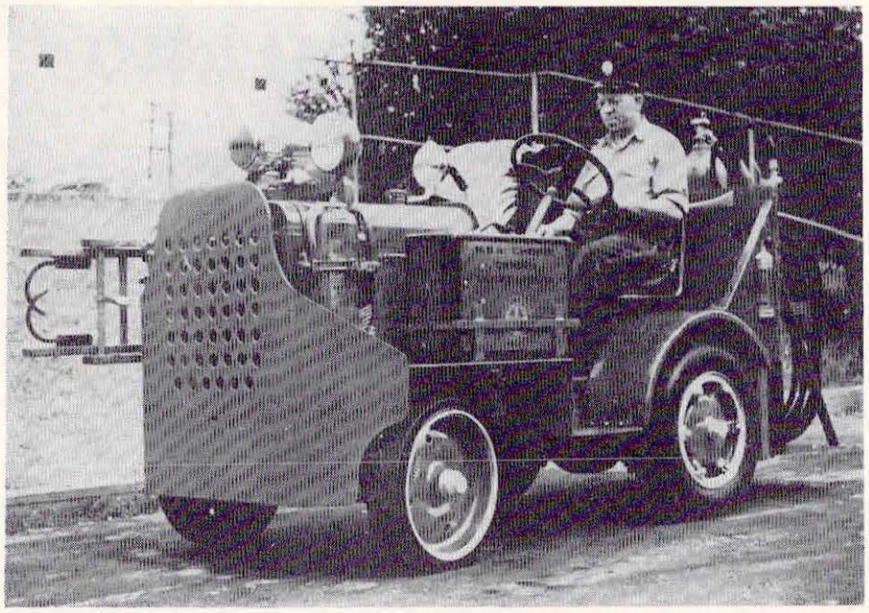
ATLANTA

TEXACO Railroad Lubricants
AND SYSTEMATIC ENGINEERING SERVICE

Faithfully yours 50 *for Fifty Years*

TUNE IN: Tuesday nights on television—the TEXACO STAR THEATER starring MILTON BERLE. See newspaper for time and station.



A PLANT FIRE TRUCK that can easily negotiate narrow plant aisles has been designed for the Chevrolet Division of General Motors Corporation in Baltimore. The truck actually is a Clarktor mule, to which Ansul dry chemical fire equipment has been added. The unit also carries a 20-ft. extension ladder, breathing apparatus, rubber boots, fire axes, siren and searchlight. Its maneuverability adapts it to close quarters.

High-Voltage Insulation Tester

A device for performing a type of testing new in railroad practice is the Takk high-voltage d.c. insulation test set, introduced by the John Hewson Company, New York 5. The primary purpose of the set is to detect insulation weakness before breakdowns occur and thus prevent failure of high voltage electrical apparatus in service. The test set is being used for dielectric-absorption tests, over-potential tests and specific fault location on motors, generators, transformers and cables.

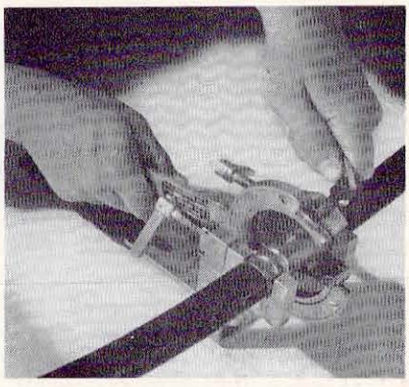
For dielectric absorption tests full operating voltage for the equipment under test is applied for ten minutes while readings of insulation leakage current are taken every fifteen seconds. A curve may be plotted of the current values against time, any variation of this curve from one test period to another indicating an impairment of the condition of the insulation.

Over-Potential Test

For an over-potential test, the applied voltage is increased steadily to the desired test voltage and held there for one minute. The manufacturer states that excessive leakage current readings normally occur well before the point where breakdown of weak insulation might occur. Apparatus passing this one-minute overpotential test may be returned to full operating load without further test for at least one year without undue risk.

The manufacturer also states that when used for specific fault location, the d.c. test is far less harmful to good insulation than an a.c. test.

The test set shown in the illustration is a 45 kv. multirange unit, with three voltage scales of 0-1.5 kv., 0-15 kv. and 3-45 kv. Three current ranges are also supplied of 0-50, 0-250 and 0-2,500 microamperes. It is operated from a 115-volt, 60-cycle power source. The set measures 15 in. by 22-in. by 34 in., and weighs 130 lb. The direct current is produced by cold cathode diode rectifier tubes, which require no filament warm-up time before impressing full voltage on them. The test set is not damaged when a dead short is encountered in the apparatus under test.



Splicing Connectors

The F. M. Anthony Company, Piedmont 11, Cal., is now manufacturing for railroad, as well as industrial, use a new line of electrical splicing connectors, terminals lugs, rubber and Neoprene insulating sleeves, and crimping tools under the name of Insul-Lock.

The feature of this line is that it provides a single mechanical-type portable hand-crimping tool which makes a full circumferential crimp and will crimp a range of wire and cable sizes from No. 4 up through 500,000 circular mils without changing dies or the application of heat. Yet the tool is light in weight (2¾ lb.), simple to operate and requires practically no maintenance. It works on a ratchet principle and rolls a crimp into the connectors and lugs.

The portable hand tool can be operated in tight places and is adapted to general industrial construction and maintenance wiring. It can be used in connection with a full line of two-way splicing connectors and terminal lugs for both flexible and standard stranded types of cable, also cable adaptors and other special fittings. For welding cable, premolded rubber and Neoprene insulating sleeves can be put on over their splicing connector with a special mounting tool. This method saves time over the conventional taping method, and at the same time makes the job permanent.

Your profit's in their freight, not their weight!

That's the best reason for investigating the weight-saving possibilities of aluminum freight car construction.

Without sacrificing strength, you can build aluminum box cars that are ten feet longer, weigh 20% less, and have 25% more cubic capacity than conventional forty-foot cars. Without using aluminum in center sill, cross-bearers or trucks, a 50-foot aluminum car still saves 9,440 pounds of dead weight.

Ask your car builder or Alcoa sales engineer to give you the facts on lightweight cars constructed with Alcoa Aluminum. Or write:

ALUMINUM COMPANY OF AMERICA
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FIRST IN ALUMINUM

"SEE IT NOW" with Edward R. Murrow — CBS-TV every Sunday . . . brings the world to your armchair. Consult your newspaper for local time and channel.

"Congratulations"

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DIESEL CYLINDER HEADS

Catering to the Railroad Industry
All Heads Tested
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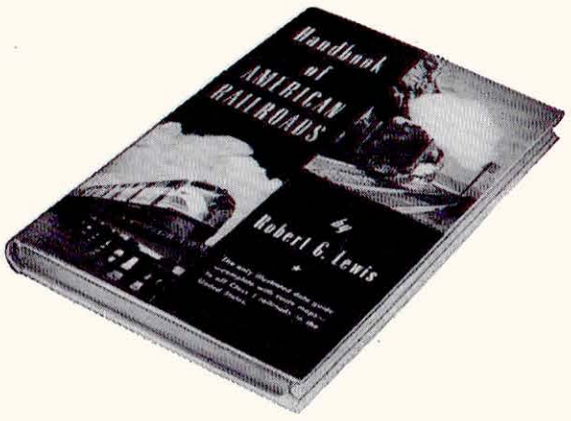
EDWARDS SASH
THE EYES OF TRANSPORTATION

SASH FOR EVERY TYPE OF TRANSPORTATION—ON LAND, ON THE SEAS, IN THE AIR



Official Facts, Figures, Photos and Maps of Every Class I Railroad in the U. S.

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How many diesels has the Chicago, Burlington & Quincy? . . . When was the Gulf, Mobile & Ohio started? . . . Who is president of the St. Louis-San Francisco? *Handbook of American Railroads* supplies you with these and tens of thousands of other answers.

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Now you can get—for the first time under one cover—official up-to-date facts on 127 Class I railroads. Specially-drawn maps show the route of each road. Beautiful action photos of crack trains such as Twin Cities Zephyr, The Red River, The Inter-City Limited, and dozens more fill the book.

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Benchmarks and Yardsticks

A MAN WITH A RESPONSIBLE JOB around a railroad today needs a wider variety of talents and skills than the same assignment called for a generation or two ago. A superintendent's job used to be one of running a division. That chore is still his but, added to that, he ought now to have the ability and the information enabling him to interpret, with conviction, company and industry policies—to employees, patrons and the public generally.

The chief executive of an important railroad today might easily spend half or more of his time meeting and talking to people outside his direct line of duty—and not be wasting his employer's time either.

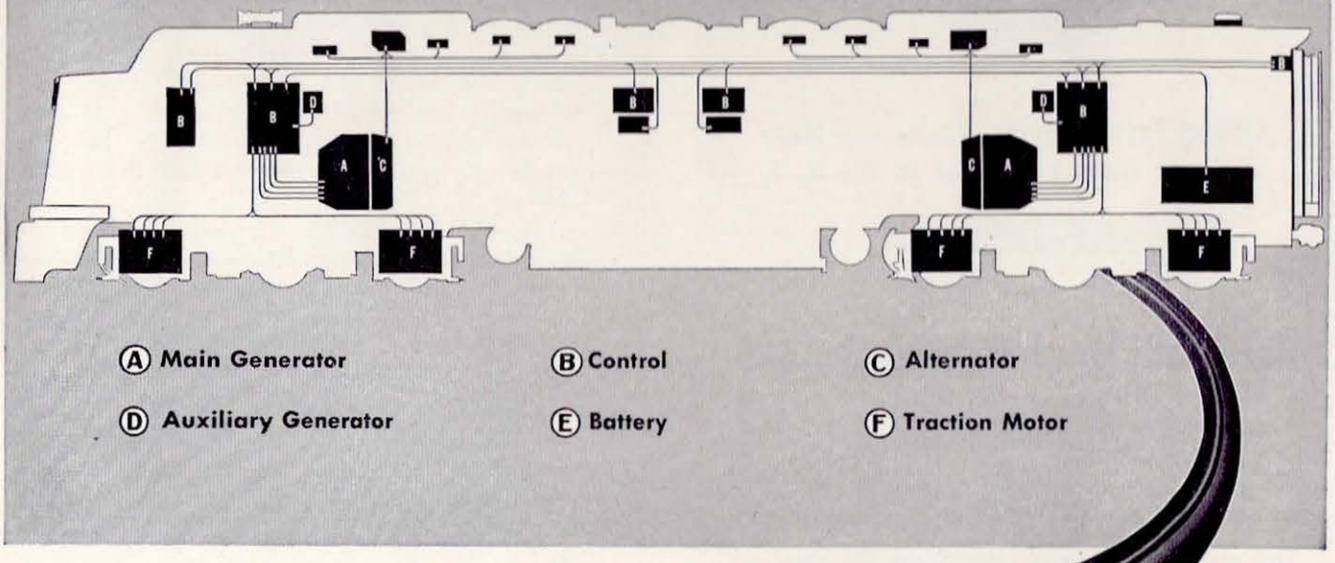
People can be employed to write advertisements and booklets and speeches—but such things, after all, are only the background of a railroad's public contacts. Nobody is really convinced that such formal pronouncements are "the McCoy"—until the chief executive, and others pretty close to the top, say the same things informally, in a way that gives evidence that they have thoroughly digested what they're talking about, and really believe it themselves.

An important operating officer of a large road—retired while still young, and very observant—tells us that, out where he lives, the higher operating and traffic officers of the railroad are practically unknown to local business men. As a consequence, most of the freight of local origin is moving in trailers—except the "balloon" traffic the truckers don't want—and nobody in authority on the railroad seems to care much. They're getting to be content with the "captive" traffic which, though dwindling, is still pretty substantial.

There was a time when traffic growth came automatically as production in a territory grew. There was a time when political and public relations could usually be taken care of with reasonable satisfaction by the legal department. That time has long since passed. The individual railroad and the industry now have to be constantly interpreted and "sold." Skilled public relations and advertising men are indispensable to this task; but they are the quartermaster's department and the signal corps of the railroad army in its business and political relations. The infantry and artillery of this army must be the responsible officers, whose positions are clothed with authority.

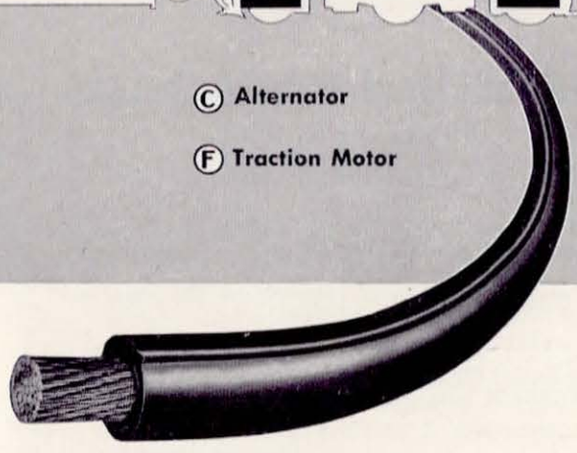
An executive's job, no matter how big, can be brought within the compass of one man's capacity—if the executive provides himself with an adequate staff organization. The Presidency of the United States proves that. J. G. L.

7000 feet of wiring
...and every foot is vital!



Ⓐ Main Generator Ⓑ Control Ⓒ Alternator

Ⓓ Auxiliary Generator Ⓔ Battery Ⓕ Traction Motor



And because every foot is vital, men who build Diesel electric locomotives usually specify Okonite-Okoprene Diesel Locomotive Wiring. It's especially built for Diesels, to meet rigid Diesel requirements.

The more than 1¼ miles of wiring on a Diesel electric locomotive, for example, should give perfect electrical performance while under constant attack from moisture, oil, abrasion and high temperatures. Here's how Okonite-Okoprene performs this task:

★ **Okonite insulation — proved in railroad service for nearly 75 years — retains its tensile strength, elasticity and high electrical values throughout a long service life.**

★ **Okoprene sheath—tough and rugged—will not rot or deteriorate with moisture... is particularly resistant to petroleum products in general railroad use . . . withstands persistent abrasion . . . will not support combustion or communicate flame along the cable.**

Because of its doubly durable construction, Okonite-Okoprene DEL Wiring is fast replacing varnished cambric and other types of insulated wire for vital generator and motor leads, headlight wiring, controllers, cab signal circuits and others. For detailed information and dimensional data on DEL Wiring, write today for Bulletin RA-2078A to: The Okonite Company, Passaic, N. J.

The best cable is your best policy

1300

OKONITE SINCE 1878 ***insulated wires and cables***

RAILWAY AGE
EDITORIAL COMMENT

ROCK ISLAND MARKS ITS 100TH ANNIVERSARY

October 10, 1952, was the 100th anniversary of the operation of the first regular train on the tracks of the Chicago & Rock Island Railroad Company—predecessor of the present 8,000-mile Chicago, Rock Island & Pacific railroad system reaching 14 states.

This anniversary marks more than just the passing of the century mark. It was not so very long ago (1936) that the Rock Island was physically, financially and spiritually a very sick railroad—so sick that many competent railroad and financial analysts and observers believed it ought to be broken up and sold. But for the vision of a few individuals that might have happened. Today the Rock Island is very much alive, financially robust, and looking forward eagerly to a second century of service.

This entire issue of *Railway Age*—all except the news pages—is devoted to the Rock Island. The editors have taken the occasion of its 100th anniversary to report on the railroad as it is today, and on the tremendous strides it has made in building itself back to financial health and organizational vigor. Men who knew the Rock Island then and who know it now, consider its progress during the past 16 years as little short of miraculous. That is the theme of this issue.

It is true that the financial strength of the railroad today is due in large measure to the stringency of the Interstate Commerce Commission's reorganization plan, in which the stock of the bankrupt company was held to be without value. The reorganization reduced its funded debt from $279,649,720 as of July 1, 1933, to $100,853,150, exclusive of equipment obligations. However, the reorganized company, which took control on January 1, 1948, with J. D. Farrington as president, further reduced this funded debt by retirement and refunding operations.

Ownership-management is playing a big role in giving the railroad and its staff strength for the tasks ahead. Two individuals have large holdings of Rock Island stock, and these two individuals are active, working members of the board of directors. This has brought harmony of direction and purpose, and has enabled the road to plow a large portion of its earnings back into the property without running the risk of opposition within the board. Further, some of the directors believe that "having all their eggs in one basket" gives them more time for attention to railroad operations than they would have if there were large outside investments.

It is impossible to write about the Rock Island without also writing about J. D. Farrington, the man who, more than any other single individual, is responsible for its rehabilitation and recovery. His personal philosophy of "planned progress" has become the guiding principle of the railroad. His vast capabilities and bottomless capacity for work carried the organization over the difficult hurdles of trusteeship, and have helped instill the alertness, and interest in doing a good job better, which typifies the railroad today.

The tremendous task of building the railroad back into physical condition to meet present day traffic requirements promptly and efficiently is now largely completed. It possesses a thoroughly modern plant, a skillful, aggressive organization, under the direction of an outstanding and competent board of directors. While taking a short look over its shoulder at its colorful past, the railroad is busily readying itself for the tasks of tomorrow.

As it looks forward to a second century of transportation service it is today a road which needs defer to no other in vigor, progressiveness, and soundness of management and outlook.

The directors at their September meeting. Members are identified in the sketch on page 99. Board members Harry Darby and Charles Wiman were absent due to illness. A. O. Gibson is secretary, not a board member.

Ownership Management

A strong, working board of directors has been an important factor in the Rock Island's recent growth

It is generally agreed by those intimately familiar with the Rock Island that its organizational strength stems from two sources: a strong "working" board of directors which maintains an active interest and participation in the affairs of the company, and the vigorous, competent managerial staff headed by President Farrington.

The Rock Island board of directors is noteworthy in several respects. There is the close, effective kind of teamwork between the board and the top administrative staff that stems from mutual respect. The board meets regularly once every month (except in July or August) and has maintained a consistently good record of attendance. The board is a "local board"; i.e., its members—with but one exception—live in the territory served by the railroad and are, therefore, intimately familiar with local conditions which might affect it. No member of the board (other than President Farrington and Vice-president W. F. Peter) receives any compensation from the railroad other than the regular fee for attending meetings. The two individuals who hold uncommonly large blocks of Rock Island stock—reportedly among the largest blocks of stock of any major railroad held by individuals in the country—are active, working members of the board.

The strength of this board can be traced back to the bondholders' protective committees—to large holders of the old Rock Island bonds such as James Norris,

A Railway Age portrait

and to the reorganization committee, of which E. E. Brown was chairman. Up to 1930, like most western roads, the Rock Island had been run by absentee financial management in the form of a board of directors which met in an eastern city—many miles from the property. It was mutually agreed that the new directors should come from various parts of Rock Island territory, and that each member should be a competent businessman. J. D. Farrington was appointed chairman of the board, to give him greatest possible authority for the proper execution of his responsibilities.

Today, 4½ years after the present board's formation, its make-up is largely unchanged. The board is not a "rubber stamp" body. There are frequent honest differences of opinion, and discussion of some subjects has gone on for months before sufficient agreement was reached to justify action.

Although the operating management is represented by only two members of the board (Messrs. Farrington and Peter), the board makes a policy of maintaining close contacts with the individuals of the managerial group by lunching with them every month immediately prior to the regular meeting.

Thus far, the executive committee—which is purposely formed of members convenient to Chicago who can assemble on short notice—has been unanimous in its decisions, though many honest differences of opinion have existed and had to be reconciled.

Unlike many railroads, the Rock Island has no outside interests and must, therefore, derive its entire income from operating the railroad. Although new oil basins are being discovered in Oklahoma and Kansas, the Rock Island owns no oil lands.

The board, in addition to handling routine business, has devoted considerable attention to the railroad's relationships with the communities through which it passes. Such considerations raise numerous and complex social and economic problems. But the board has taken a firm stand to the effect that a railroad has local community responsibilities, much the same as purely local enterprises.

Mr. Farrington has been giving some thought to providing for the retirement of board members when they are no longer active in their primary lines of occupation, and therefore begin to lose intimate touch with day-to-day business conditions. It is his idea that such an arrangement would provide for a regular and orderly rejuvenation of the board over a long space of time. If such an arrangement can be worked out, the probability is that the Rock Island will be able to retain much of its managerial vigor and competence for a long time to come.

The present members of the board of directors are:

JOHN D. FARRINGTON, president and chairman of the board.

S. R. ARIAS, of New York.

EDWARD E. BROWN, chairman of the board, First National Bank of Chicago, chairman of the executive committee.

MARK A. BROWN, president of the Harris Trust & Savings Bank, Chicago, a member of the executive committee.

HENRY CROWN, of Chicago, a large holder of stock, president of Material Service Company, and a member of the executive committee.

HARRY DARBY, chairman of the board, Darby Corporation, Kansas City.

JOHN B. FAEGRE, a Minneapolis lawyer and president of the Minnesota & Ontario Paper Co.

HERBERT L. HORTON, of the Iowa-Des Moines National Bank, Des Moines.

ROY C. INGERSOLL, president of Borg-Warner Corporation, Chicago, and a member of the executive committee.

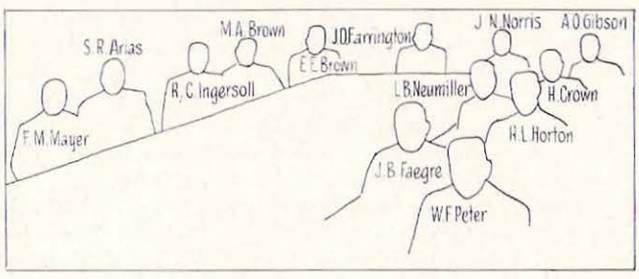
FREDERICK M. MAYER, president of the Continental Oil Supply Company, Dallas.

LOUIS B. NEUMILLER, president of the Caterpillar Tractor Company, Peoria.

JAMES NORRIS, large holder of stock. President of the Norris Grain Company, Chicago, and a member of the executive committee.

W. F. PETER, vice-president and general counsel.

CHARLES D. WIMAN, president of Deere & Co., Moline, Ill.



A Railway Age portrait

J. D. Farrington and his program of "planned progress" have prepared the railroad for another century of progressive development

Birth of the "New Rock Island"

"LITTLE short of miraculous" is how leading financial and railroad observers term the growth of the vigorous, healthy Chicago, Rock Island & Pacific railroad of today from the listless, dilapidated and debt-soaked railroad of 20 years ago.

Things were glum on the Rock Island in 1935. The railroad had enjoyed a fair measure of health and prosperity during the 1920's, in spite of its staggering load of fixed charges imposed by an earlier stock-manipulating management. It was rocked to its roots by the major economic collapse of 1929-32 and the successive crop failures of 1930-35 in its "dust bowl" territory.

Having gone into bankruptcy on June 7, 1933, by 1935 the road was physically depleted—badly in need of a complete overhauling—and employee *esprit de corps* had about ceased to exist. Competent and qualified analysts and observers saw little hope for rebuilding the property. They even suggested it be abandoned and large portions sold for scrap, with the few "essential pieces" sold to other and stronger railroads in the territory.

The protective committees for the bondholders, and Joseph B. Fleming and Frank O. Lowden, two of the trustees, did not agree, but they did see that their only hope lay in finding a completely new management.

The first problem was to find, to head up the operating department, a hard-hitting officer, with progressive ideas and an ability to achieve the impossible. This search led to Fort Worth, Tex., and the Fort Worth & Denver, whose general manager, J. D. Farrington, had risen

through the ranks of the Burlington system and who had scored a fine operating record.

It was a difficult decision for Mr. Farrington to make, but the potential opportunities won him over, and on July 1, 1936, he joined the Rock Island as its chief operating officer. History records that as the date when "things began to happen" and the road began its climb back to health.

Planned Progress

The Farrington doctrine then, as now, was "planned progress." A thorough survey of the property clearly showed that, for the Rock Island, progress would have to begin at the very bottom—and the way this was done is described elsewhere in this issue.

Today the Rock Island has a thoroughly modern plant, equipment and operating practices. It is a healthy, fighting railroad capable of rendering stiff competition in the territory it serves, with a strong financial structure capable of withstanding all probable blows.

Because of the severity of the commission's plan for the reorganization of the company, the trusteeship was marked by bitter disputes and contention.

The true measure of Mr. Farrington as a man emerged during the latter years of the reorganization when the administration of the railroad rested with two trustees who were more or less openly in conflict with each other. This situation kept Mr. Farrington from effecting many improvements that would strengthen the railroad both physically and financially. During that difficult period, Mr. Farrington was able to retain the gains so ardously acquired earlier, and unobstrusively to make a few more. His skill in administration enabled the revived railroad to emerge from this trying period with a clear record.

In talking about the railroad as it is today and as he hopes it will be tomorrow, Mr. Farrington is apt to cite as the Rock Island's greatest assets its "vigorous, working board of directors"—which, it might be recorded, Mr. Farrington esteems most highly—and its staff of young, forward-looking, yet solidly competent officers.

The individual members of the board of directors are unanimous in their admiration and respect for Mr. Farrington. "Without his skill and energy, his continuous search for new and better ways of providing railroad service at lower cost, and his complete loyalty to the Rock Island," says Edward E. Brown, chairman of the executive committee and chairman of the board of the First National Bank of Chicago, "it would be impossible for the board to perform as effectively as it does."

Traffic Keeps the Trains Moving

Proficiency and skill in solving rate problems and determining service requirements—plus salesmanship—used to build traffic and revenues

It is the responsibility and duty of top freight traffic officers to keep themselves informed of general business conditions; keep alert to and seek out opportunities to develop traffic; keep abreast of conditions on the railroad," Ephraim Rigg, vice-president—freight traffic, believes, "as well as to assist patrons in developing new markets and in the location of new industries through the provision of proper rates and services." These are the guiding principles which the Rock Island's freight traffic department seeks to follow in the everyday conduct of its business.

Freight rates *and* dependable service are the most important tools of a traffic department. Job No. 1 is the establishment of freight rates that are both profitable to the railroad and responsive to the needs of commerce. Job No. 2 is the maintenance of dependable service. The skill and dependability with which they are performed—because of their effect upon freight revenues and train-miles—determines the measure of success attained and will be clearly reflected in the operating ratio. The Rock Island's low operating ratio is—in part, at least—a tribute to the traffic department's record of performance.

According to J. M. Spann, general freight traffic manager, the traffic department, in planning its organization, has endeavored to keep a proper balance between age (for experience) and youth (for energy). It believes there is no substitute for either, and consequently makes a pointed effort to maintain a careful balance. "This gives the department," W. B. Futral, freight traffic manager (sales and service), points out, "the energy and drive to keep constantly on the go after new business, and the wisdom to plan its actions so as to be of maximum benefit to the company."

Careful Organization

Through a program of self development, the department has been able to promote personnel from its own ranks to key positions in the process of its reorganization and has not found it necessary to go "outside" for that purpose. Prudent drawing from the ranks, aided by a conscientious effort to select men capable of succeeding, has marked the department's continuing efforts to assemble and maintain an invigorating organization.

High standards are observed in the selection of men for traffic sales work, because the department realizes that these men are "Mister Rock Island" to the shipping public. It is essential, therefore, the Rock Island reasons, that these men who are its most important means of

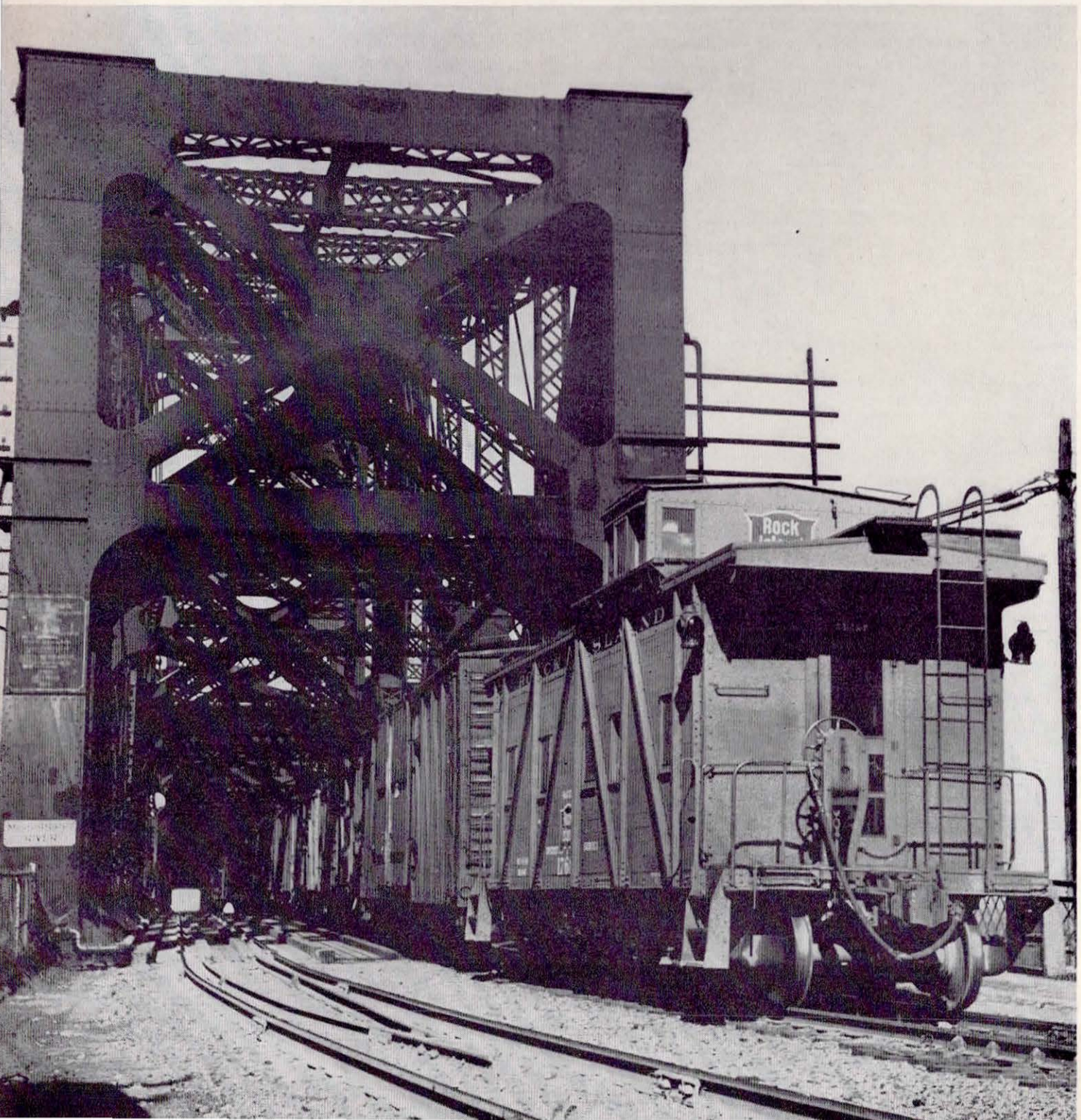
contact be of the highest possible caliber. It is now traffic department policy to draw men from the rate and operating departments for training to fill these important positions of contact, on the ground that a thorough knowledge of both rates and transportation service is essential to a solicitor. The department believes a candidate can be taught one or the other in a reasonable time, but to undertake the teaching of both is too long and arduous.

Because good transportation service is the chief item in the solicitor's saleskit, the traffic and operating departments have made a pointed policy of fostering regular personal contact between individuals in the two departments, at all levels. A stranger going over the line cannot help but notice the very high degree of cooperation which exists between these departments. Local traffic representatives endeavor to get together at least once a month with local trainmasters, yardmasters and other operating personnel to discuss their problems. Division freight agents and superintendents likewise get together frequently to discuss mutual problems, and so on up to the very top level in the general offices in Chicago.

A knowledge of the other man's necessities works both ways. Thus, the traffic department recognizes the necessity of having adequate tonnage available before it can ask for more frequent service. When it finds itself in the position of having somewhat more tonnage than one train can handle, it makes a concerted effort to build sufficient new tonnage to make the operation of a second train economically feasible.

As the Rock Island's property improvement program got into full stride during the late 1930's and early '40's, sales efforts were intensified. Thus, for example, when

A westbound freight crossing the Mississippi river at Memphis.



the line from Omaha to Colorado Springs and Denver was placed in condition to permit the operation of competitively fast freight trains, an intensive sales campaign was launched. This resulted in the attraction of a considerable volume of new tonnage—enough to justify the operation today of two daily fast freight trains in each direction, compared with the single slower train formerly operated.

Rate Specialists

The Rock Island traffic department has been well known in professional traffic circles for some 35-odd years for the excellence and general all-around competence of its handling of rate matters. A wide and versatile background in rates and rate-making is a Rock Island heritage which finds its roots in the road's unusual position astride key east-west and north-south trade routes.

Such competence in rates is not something which can be acquired quickly. Mr. Rigg, an authority on freight rates in his own right, attributes the competence of his staff to a continuous succession—since about 1915—of unusually able rate men in the traffic department. "We had the good fortune to study under the old masters," Mr. Rigg observes, "who could make freight rates that would attract traffic, and move it at a profit."

Because of its 14-state, midcontinental position, the Rock Island's rate men must—in their everyday work—deal with a large number of different rate bureaus covering most of the country, and consequently must remain in close and continuous contact with traffic and economic conditions in all of these areas. The practice of handling almost all rate problems (except routine quotations) in a central rate bureau in Chicago under the jurisdiction of E. A. Tharp, freight traffic manager-rates and divisions, also tends to widen the background and training of individual staff members.

An interesting by-product of the road's competence level in this field is that many of the top industrial traffic managers active in business today are "graduates" of the Rock Island traffic department.

Because of the traffic department's responsibility for making rates which move traffic—yet yield adequate revenue for the railroad—Rock Island rate men do not abandon solely to the sales forces the job of talking to industries on, or using, their line. They are uncommonly active in getting out into the field to assist shippers with rate problems. They believe that the making of rates involves a multitude of factors—and there is no substitute for personal contacts and on-the-ground observation.

Another technique used by the traffic department to preserve revenues, is the constant policing of traffic handled to insure—insofar as possible—that adequate revenue is received to cover the cost of handling, plus a margin of profit.

Field Offices

In addition to 32 on-line traffic offices, 32 traffic sales offices are maintained in other key cities throughout the United States and two in Canada, covering every area of any traffic importance to the railroad. These field men are given every possible assistance by the home office in hunting out "tips" and in assembling the vast amounts of material necessary to "win" new accounts. These sales offices are being supplied with improved daily reports of car movements enabling them to report

A Railway Age portrait

"Rates must be profitable to the railroad, yet responsive to the needs of commerce."—Ephraim Rigg, vice-president—freight traffic, and a nationally recognized authority on freight rates.

movements to interested shippers or receivers within hours, if necessary.

The Los Angeles, San Francisco, Toronto, Detroit, New York and Washington offices are linked with Chicago headquarters by telegraphic printer circuits—and new offices are being added to the circuits as rapidly as details can be ironed out—so that they receive up-to-the-minute reports of car movements for the benefit of customers.

Traffic conditions on most railroads change from month to month, so that the trend as well as the volume of traffic are never static. Consequently the traffic department, under the direction of R. C. Davidson, freight traffic manager—administration, maintains continuous study of the different segments of the system: first, to be sure that service and facilities are kept abreast of current conditions, and, second, to make certain that one part does not become a drag on the other parts. In the consideration of light-traffic branch and secondary lines, the traffic department works with a system-wide management committee in the detailed study and analysis of conditions on specific lines. Where these studies indicate the propriety of such action, sections which have become unimportant to the railroad as a whole, after weighing the effect on long-haul main-line traffic, are abandoned.

New simplified reports developed by the accounting department provide operating and traffic offices with faster, more useful information. This busy grain export terminal is at Galveston.

An "Old Hand" at Machine Accounting Develops New Methods

How the Rock Island streamlines its paper work for better records at lower costs

As one of the very earliest railroad users of mechanical and electrical accounting equipment, Rock Island men are thoroughly versed in their operation and the road has, over a long period of years, gradually extended their use to almost every phase of accounting. Today, the CRI&P is one of the largest railroad users of automatic accounting equipment.

Machine accounting methods were first introduced on the Rock Island in 1906, when Hollerith (since purchased by the International Business Machines Corporation) equipment was installed by the auditor of freight traffic to compile freight commodity statistics. In 1919, other equipment was installed by the auditor of car service to compile operating statistics and more mach-

inery was added in 1928 to include per diem accounting. In 1929, the office operations of the auditor of freight traffic were improved and machine applications were extended to include freight accounting as well as traffic statistics.

In common with other railroads, the Rock Island originally operated many separate disbursement accounting offices sprinkled throughout the system, each of which prepared a separate balance sheet that was submitted to the auditor disbursements' office at Chicago and consolidated to obtain system figures. In 1923 and 1924, the 23 divisional shop and store department offices were combined into five subdistrict accounting offices which were, in November 1936, further consolidated into one centralized accounting office at Chicago. At that time punched card machine methods were adopted for timekeeping and disbursement accounting.

In 1939, freight traffic, car service and disbursement machine accounting applications were consolidated into a centralized machine bureau, headed by an auditor of machine accounts, to obtain fuller utilization of labor and equipment and to effect standardization of systems and procedures. Older equipment has been periodically retired and replaced with modern electrical tabulating and computing equipment to the point where 141 I.B.M. accounting machines plus Comptometers, Burroughs computers, Monroe and Marchand electric calculators are all now in use.

In 1941, President Farrington formed a Committee on New Methods and Machines for the purpose of eliminating duplication of effort, simplifying and consolidating procedures, and developing new methods or means of attacking old problems. This committee, with H. H. Siddall, special assistant executive department, as chairmen, and consisting of a representative from each department of the railroad, has already effected a number of important improvements. The efforts of this commitee have resulted in the introduction of improved machinery for use in various offices and for various accounting functions, and have assisted in increasing the efficiency of overall accounting operations.

Teletype Wheel Reports

One of the most extensive recommendations made by the Committee on New Methods and Machines led to institution of a revised form of wheel report which can be reproduced by telegraphic printers and serves also as a traffic tracing and passing report. One copy of the report, typed with a Ditto ribbon, is reproduced and airmailed to all key traffic offices. This procedure permitted discontinuance of the so-called "traffic manifest" formerly prepared by the accounting department and the reduction to one-tenth of its former volume, of the old "Red and Gold Ball report" prepared by the operating department.

Although telegraphic printers had been used since 1938 for the transmission of wheel reports over the high-density route between Chicago and Tucumcari, N. M., it was necessary to extend the service to include all important intermediate points, and to other lines not previously served, in order to institute the new reports. Since this was completed in 1950, consists of all trains moving over the line, together with all interchange reports covering deliveries to and receipts from foreign lines, are now transmitted to Chicago. This arrangement, in addition to eliminating the preparation of other time-consuming reports, has drastically reduced the number of tracers coming in from the various traffic offices.

A Railway Age portrait

The Rock Island is one of the earliest, and one of the largest, railroad users of automatic accounting equipment. H. H. Siddall, general auditor, is in charge of all of the road's accounting functions.

Studies are now being made of Flexowriter equipment to permit direct preparation of statement and punching of accounting cards from incoming telegraphic printer circuits, as a move to simplify and expedite car accounting still further.

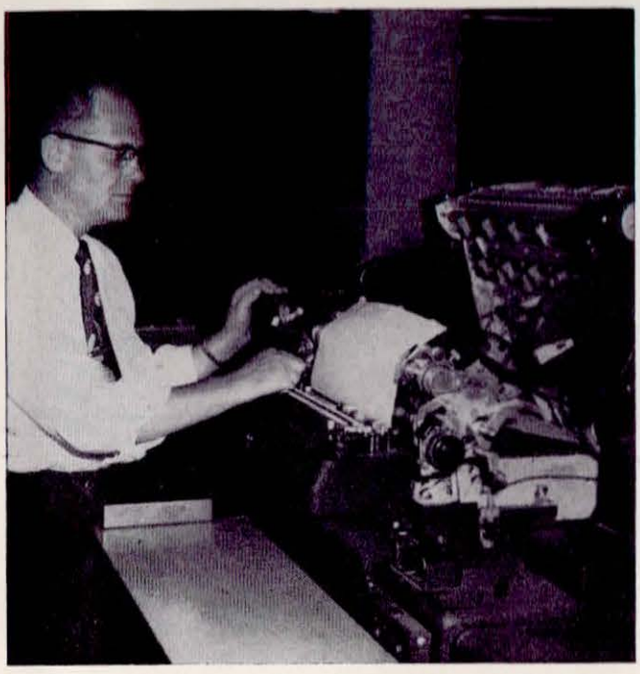
Material Accounting

The accounting and the purchases and stores departments, working together, have devised a method for handling material accounting on I.B.M. machines which has been the subject of much study by other railroads. The CRI&P originally used 10 separate stores balance sheets which had to be consolidated into a single system balance sheet. Inventory was taken manually, by item names, and similarly extended by the last-reported price for each item—a process requiring many man-hours of clerical labor. In 1939, following the consolidation of all accounting offices in Chicago, the preparation of individual stores balance sheets was discontinued in favor of a single system sheet, and a new standardized system was adopted, based on the use of uniform code numbers for all material items. Every conceivable item of supply has a code number.

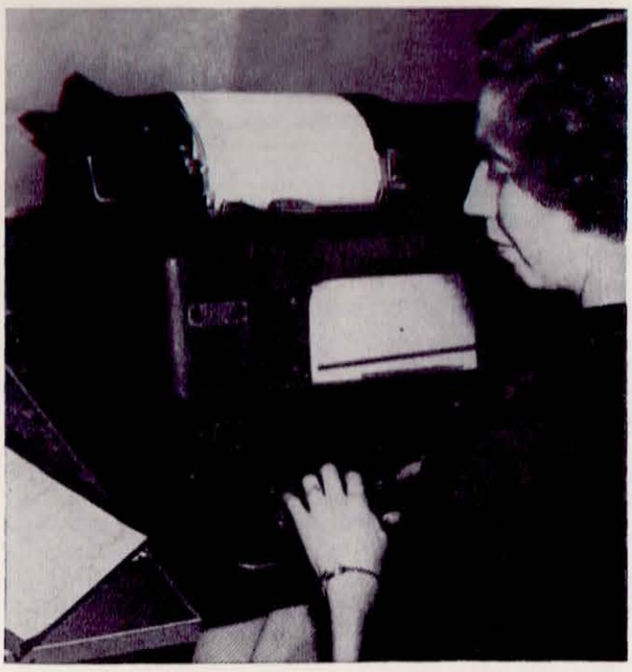
The accounting department maintains a small pricing bureau which keeps the current price for each stock item, by code number, on a master punch card. The latest purchase price is used for all reporting. Unit prices are used on everything except bolts, screws, nails, cast iron, brass, lumber and such items where there are many variations in sizes. These are arranged in convenient groups, and an average price used for each group.

When a storekeeper draws material, he now only needs to note the code number, quantity drawn and the account to be charged. This information is transferred to punch cards by the machine department, which then sorts each month's cards by code number. The master card for each code number is placed with the detail stock cards and processed by an I.B.M. computer which punches the price extension into each stock card. The stock cards, now bearing a price extension, are then arranged by accounts to be charged and run through an I.B.M. printer for statements by accounts, with an automatic total computed for each account.

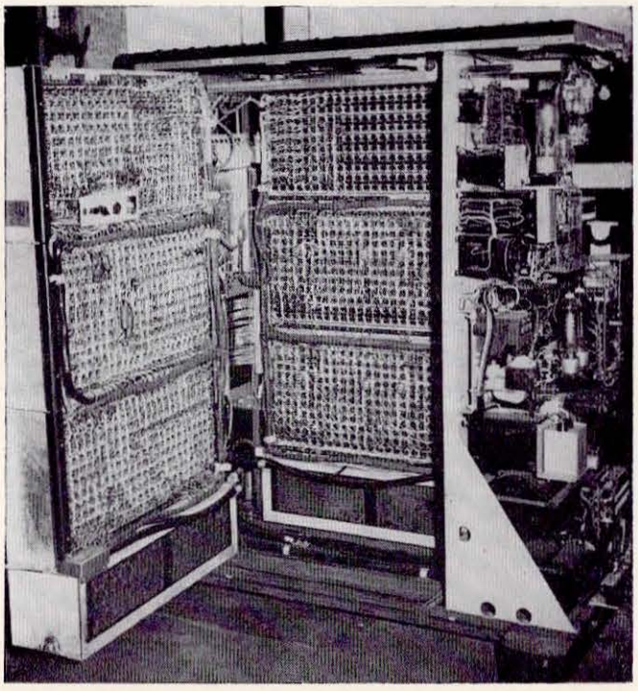
The Rock Island's machine accounting bureau is continuing to expand. Plans now under consideration include methods for transmitting material contained on



Typical of the many ways of getting more use out of existing machines is this arrangement whereby a special tabulating head attached to an I.B.M. printer for the preparation of pay checks is folded back and the machine is put to other uses when not engaged in payroll work. E. C. Weir auditor of machine accounting, is examining the statement being printed.



A revised form of wheel report was developed by the accounting department with the assistance of the traffic and operating departments, which has greatly simplified the preparation of statements and speeded the issuance of passing report information to distant traffic offices. The Teletype operator at Silvis yard office prepares an advance wheel report on the new form.



Inside view of one of the two I.B.M. electronic computers used by the Rock Island in its rapidly expanding mechanical accounting bureau.

Teletyped wheel reports direct onto punch cards, eliminating manual punching of information from the Teletype sheet to the cards. This will be coupled in with a newly mechanized system of car accounting which will shortly be placed into effect.

In the mechanization of the car accounting and statistical work currently under way the following records are now being produced mechanically:

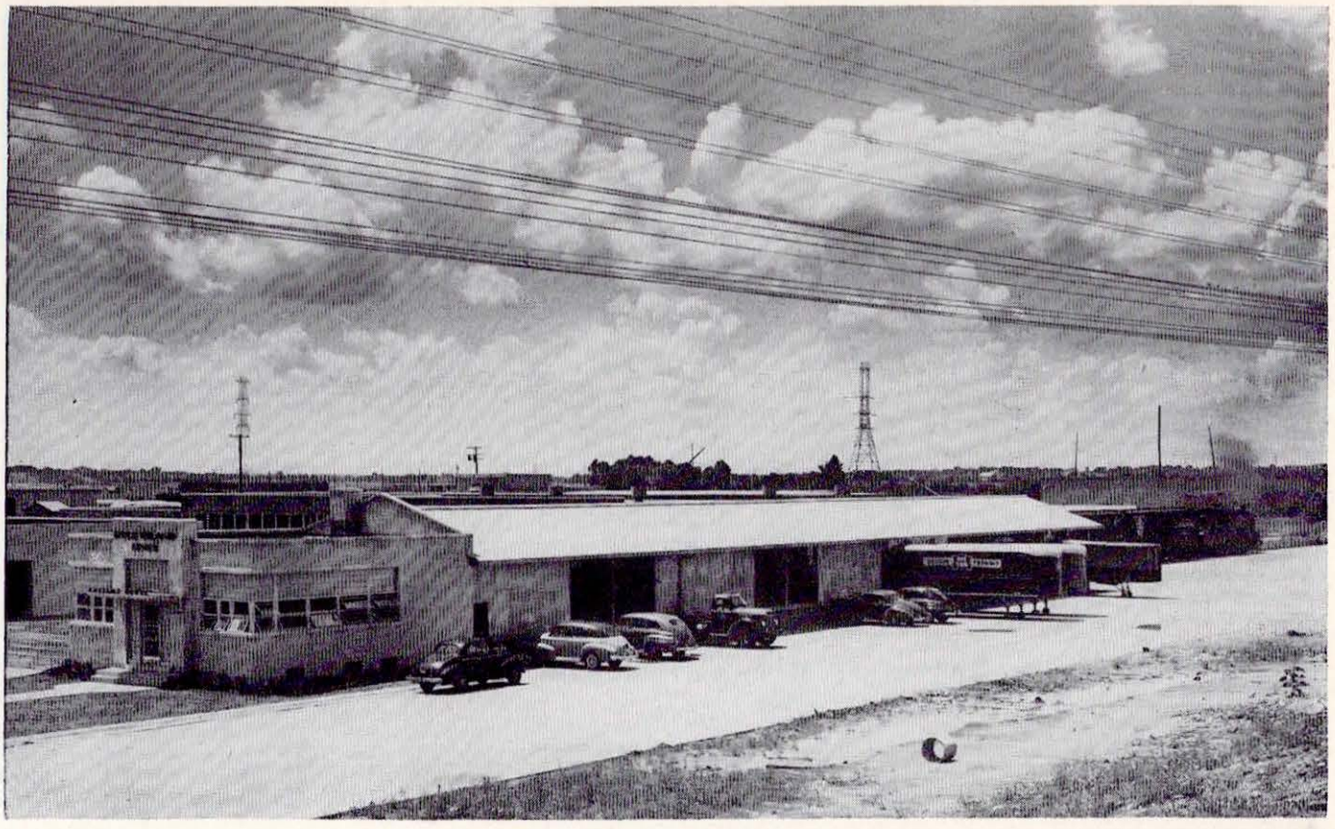
(1) current car record files
(2) separation of current car record files into system, foreign, and private ownership
(3) per diem payable for use of foreign cars
(4) line mileage payable for use of private cars
(5) accounting for per diem receivable from use of CRI&P cars on other roads
(6) compiling gross and net ton-miles
(7) compiling loaded and empty car-miles
(8) locomotive statistics.

Recent extensions of machine accounting include application to centralized station accounting (covering all stations on the system), punch-card pay checks, distribution of shop labor, loss and damage claims, and indexing vouchers payable and bills collectible.

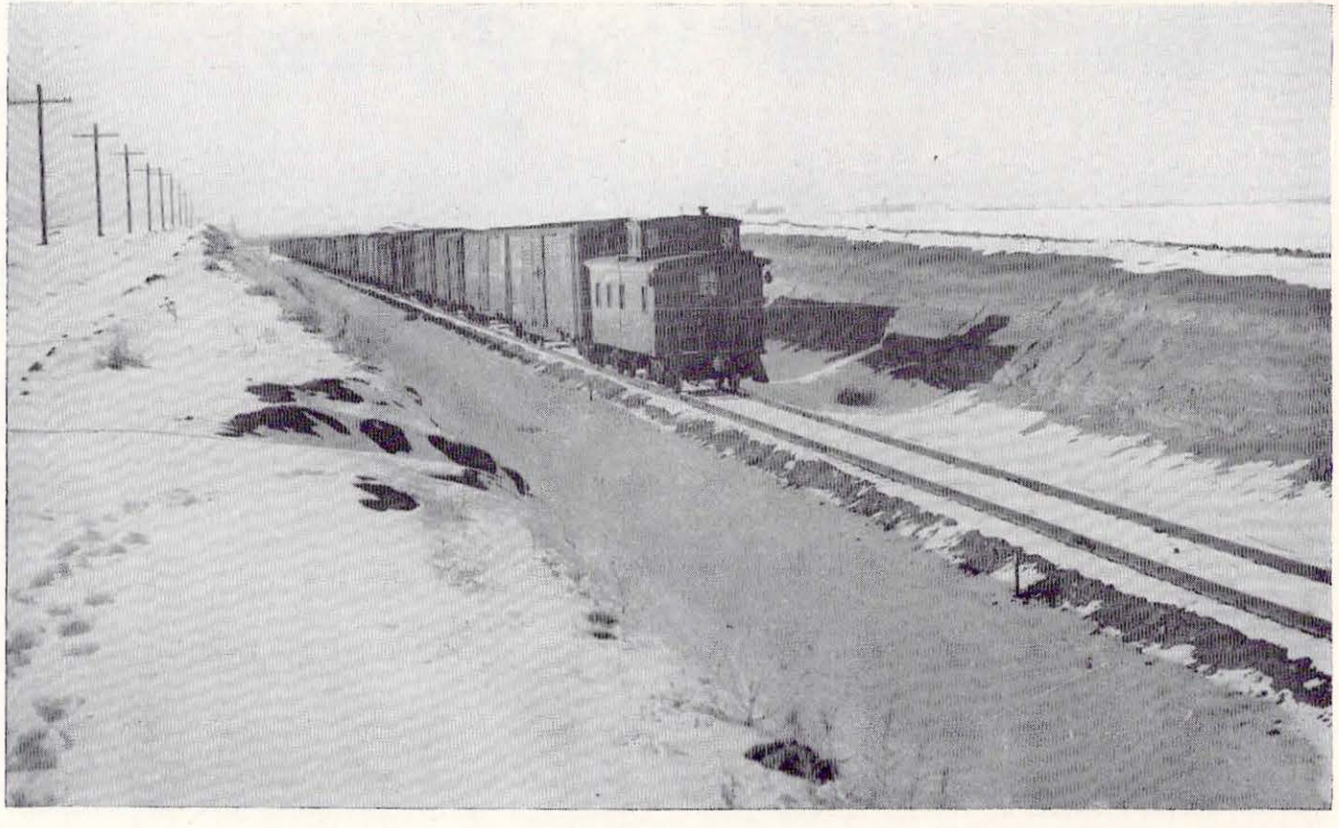
Recordak Machines

The microfilming and projection of waybills on Recordak machines was instituted in 1938 at the larger terminals, to speed interchange of cars with foreign lines. This process eliminates the necessity for holding cars while the waybills are copied for essential office records. Duplicate copies of each film are produced, with one being retained by the station, and the other being forwarded to the accounting department.

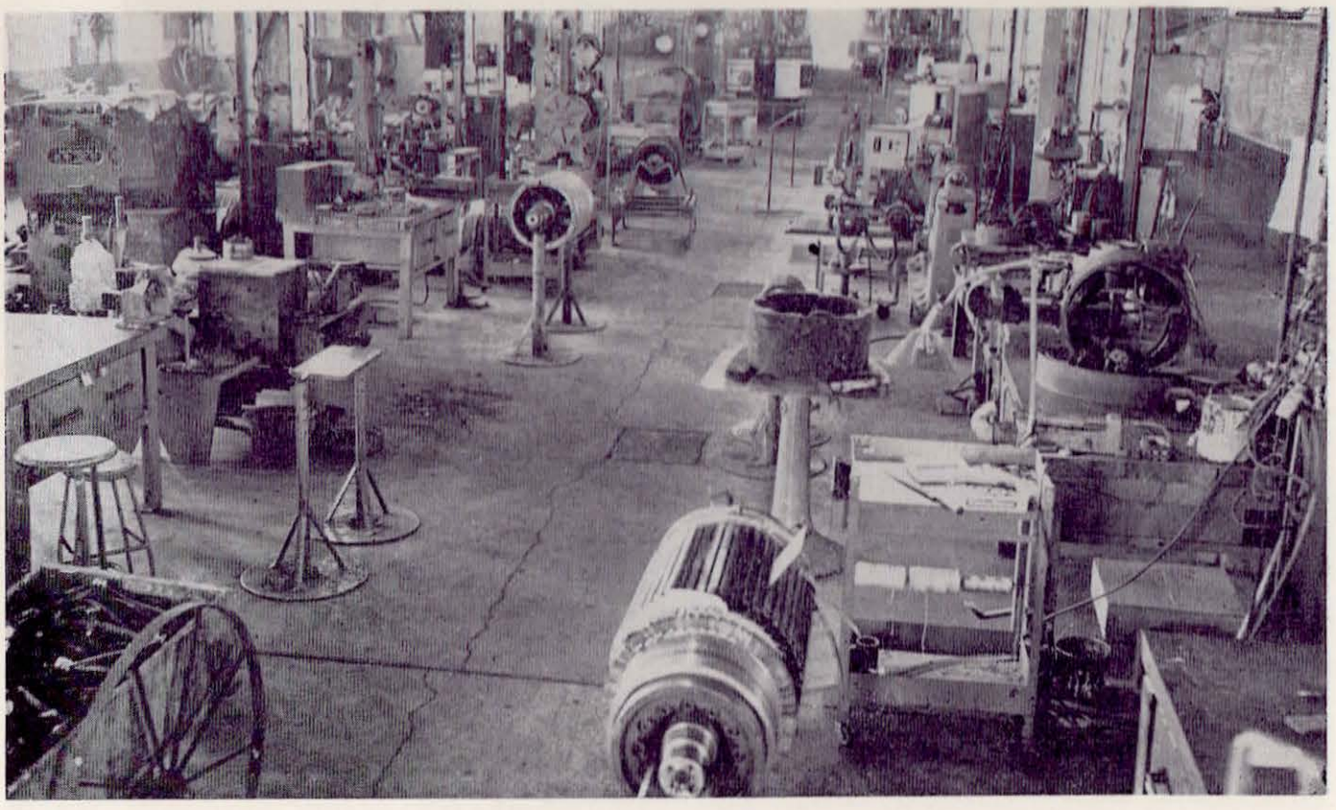
At Chicago and Kansas City, "shipping orders" for "collect" l.c.l. shipments are stamped with an imprint showing station name and number and waybill number and date, and with space for showing the rate and extended freight charges. After rating and extending the charges, the shipping orders are photographed and accompany the shipment in lieu of a waybill. The developed film is retained at the station and serves as a billing record.



For many years business in Dallas was conducted in leased facilities. This recently completed station and attendant facilities in Dallas have been located in one corner of the Trinity Industrial District, where they are convenient to customers in all parts of the metropolitan area.



Changes and improvements in line have enabled the Rock Island to effect both operating economies and improvements in service. Here an eastbound train is traversing the new Sandown cut-off at Denver.



Interior of a portion of the Rock Island's model electrical shop at Silvis.

To increase locomotive utilization . . .

Modern Shops and Shop Practices

Rebuilding and improving of shops and shop practices have been as important in the building of the "New Rock Island" as have line changes and improved operating practices. The CRI&P operating philosophy of high locomotive utilization is necessarily based upon high standards of maintenance.

The Silvis (Ill.) locomotive shop—which has been the Rock Island's principal locomotive maintenance point since the major consolidation of lines in 1902—has been completely rebuilt and re-equipped for diesel-electric maintenance. Although the conversion program has been spread over several years, it was fully completed last month.

The new diesel facilities at Silvis occupy the building formerly used for heavy steam repairs. One end is devoted to running repairs and has four tracks, each long enough to accommodate two 3-unit freight diesels at one time.

Three of these four tracks are served by a new Whiting drop table which can be safely operated and easily alined from a central control panel. A series of nine colored lights tell the operator when he is lined up to within ¼ in. for raising the table. The release track of the table is located in the truck and wheel shop, thus bringing the removed defective truck in a single step to the point where the detail repairs are made.

Three of the four servicing tracks, and the release track, are blind end. The fourth track—the one next to the escape track—extends through to the heavy repair end and it is the only track connection between the two ends of the shop. The extension of this track and two others comprise the heavy repair trackage. One of the heavy repair tracks is devoted to stripping, and is alongside the engine repair room. Engines lifted from the locomotive are cleaned in an adjacent lye vat, after which they go directly into one end of the repair room to be rebuilt, emerging from the other end for re-application to the locomotive with no intermediate handling.

Secondary diesel maintenance shops are maintained at El Reno, and will be maintained in Chicago (for passenger power) upon completion of the new diesel shop now under construction. Diesel engine and main generator changeouts go to Silvis, along with most heavy repairs. Emergency and unexpected changeouts can be effected at the point where the locomotive is normally maintained, but the removed units are shipped to Silvis for repair and rebuilding.

Shops for servicing and running repairs are maintained at Cedar Rapids, Des Moines, Minneapolis, Armourdale (Kansas City), Little Rock, and Memphis.

Engines, main generators and auxiliary generators are scheduled for changeout at the following mileages:

Switchers—Every 10 years.
Passenger—1½ million miles.
Freight—864,000 miles (based on 12,000 miles per month for six years).

Traction motor changeouts are scheduled:

Switchers: Friction-bearing motors every 4 years; roller-bearing motors every 8 years.
Passenger: Every 400,000 miles.
Freight: Every 350,000 miles.
[Roller-bearing traction motors are used on all road locomotives and on some switchers.]

The Rock Island has not swung as far toward classified repairs as most roads, feeling that higher availability and lower maintenance costs can be attained by progressive maintenance based on specific mileage for each part—and all based on the builders' slide-rule recommendations. This program is bolstered by a preventive maintenance program which calls for the continual testing of parts by Magnaflux, Magnalo, and Zyglo to detect incipient failures. Careful records—including cross-indexing—are kept of engines, crankshafts, main and auxiliary generators, complete cylinder assemblies, traction motors, steam generator coils, and air compressors.

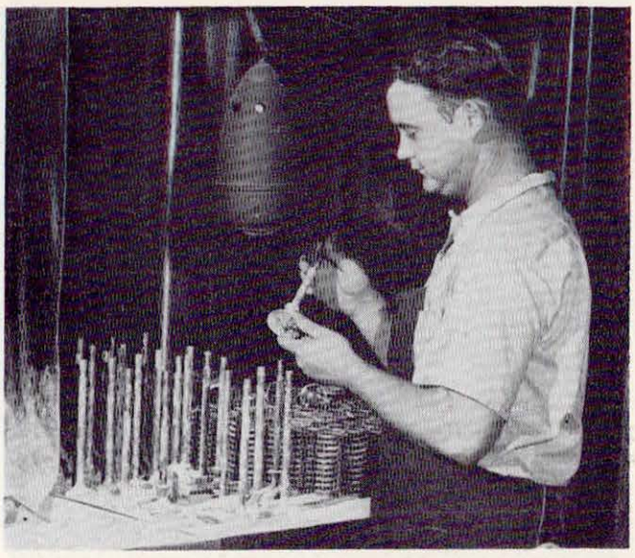
Diesel Roster

As of August 12, the diesel roster comprised:

	units	aggregate horsepower
Passenger	89	159,150
Freight	114	163,800
General-purpose road	111	163,000
Switchers	143	96,944

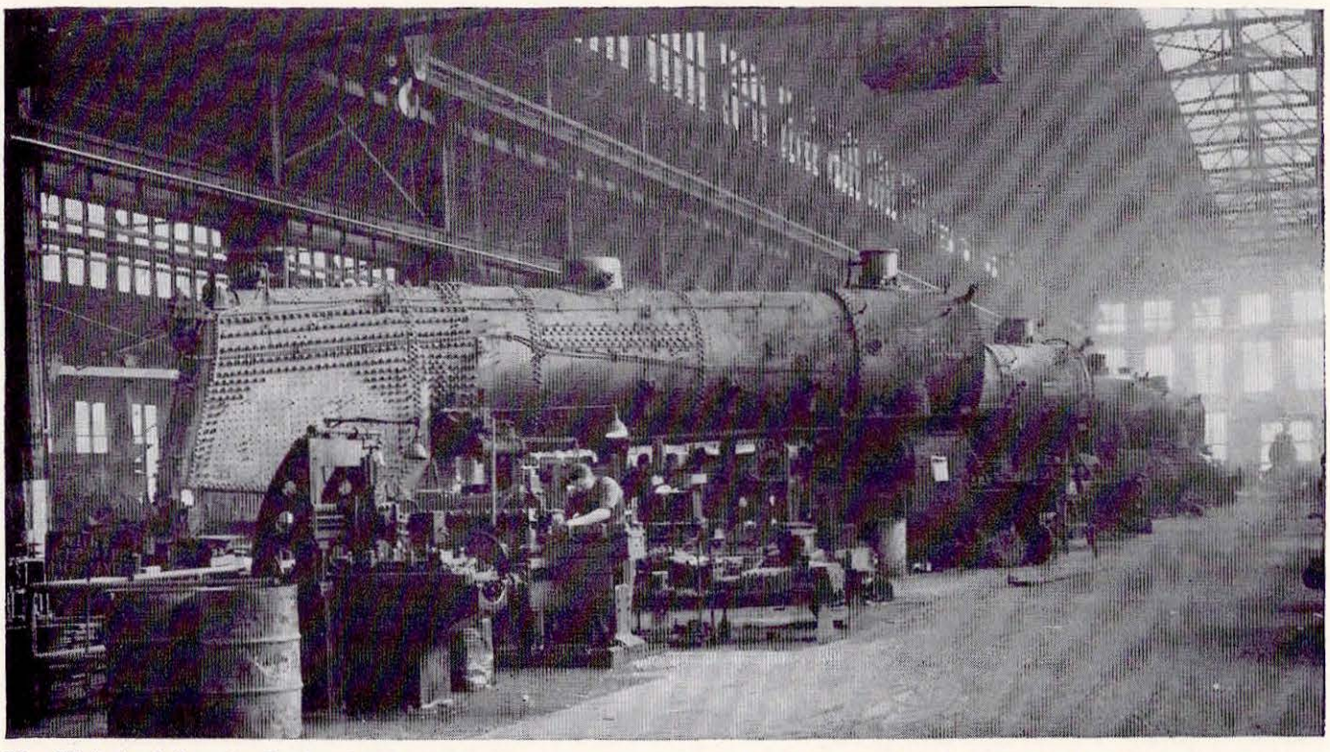
In addition, 30 Electro-Motive 1,500-hp. general purpose units and 11 800-hp. switch engines are on order, with delivery expected this winter.

Most of the Rock Island's diesels are of conventional

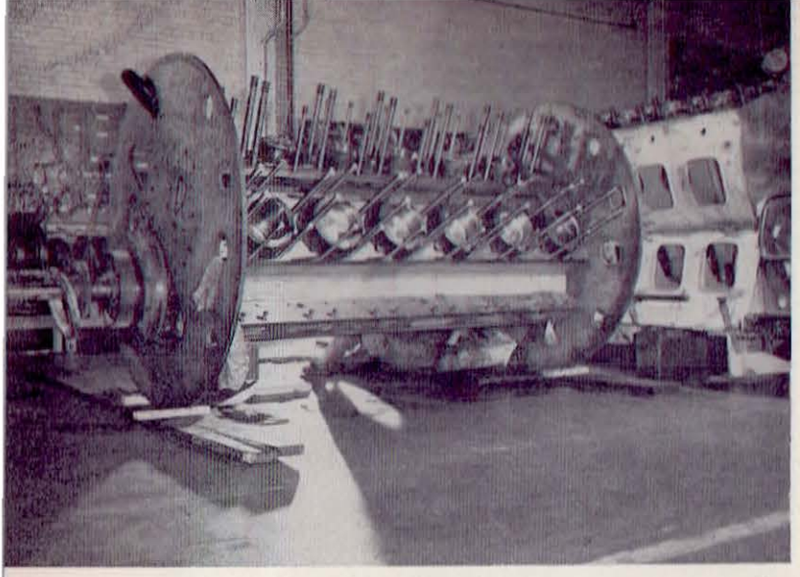


Constant inspection of engine parts to uncover incipient failures is practiced as a preventive maintenance measure. Inspecting diesel engine valves by Magnaglo.

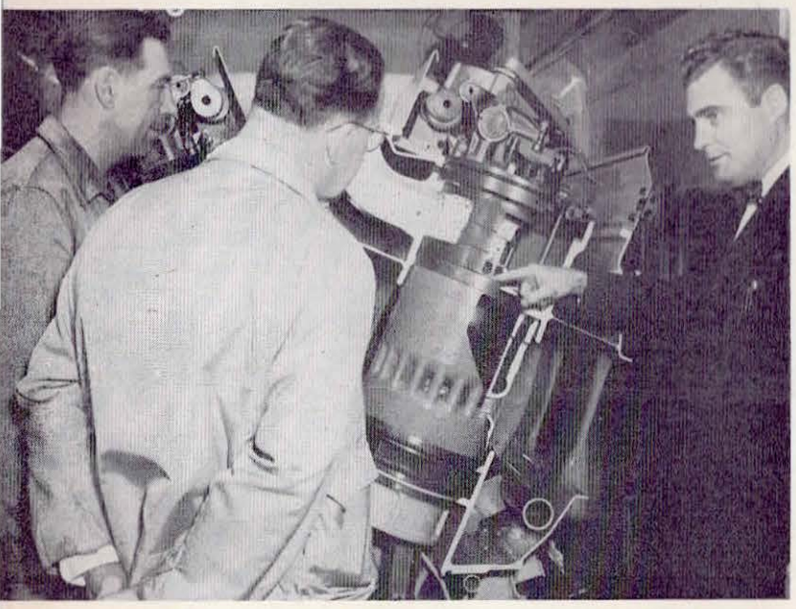
Truck repair pit at Blue Island.



The Silvis backshop in the heyday of steam power was one of the few "herring-bone" shops in the country.



Device used in the engine shop to turn engines over for removing the sump and crankshaft.



Cutaway model of diesel engine (located in diesel instruction car) helps mechanical and transportation people grasp the fundamentals of diesel engine operation and maintenance.

types built by the major builders, with the following builders represented: Electro-Motive, American Locomotive-General Electric, Fairbanks-Morse, Baldwin-Lima-Hamilton, Davenport-Besler, and Whitcomb.

The Rock Island pioneered a number of practices in diesel maintenance. It was among the first to use detergent oil and among the first to recognize the value of adequate filtering. On early units which had only one small filter the Rock Island doubled its size and used four of the double size in place of the builder's single filter. The road also displays a good deal of ingenuity in getting maximum mileage. Suburban diesels are used in freight service over the week-end, also as substitute locomotives for local diesel-powered passenger trains to permit maintenance forces to catch up on maintenance of the regular locomotive. Maximum potentialities of diesel operations are attained by the use of a 16-tooth motor pinion and loading the locomotive to or near the slip rating.

Older diesel locomotives are being ballasted and modernized to permit them to haul greater tonnage.

Lubricating oil which passes regular laboratory tests is changed on a mileage basis—150,000 miles for passenger units, 75,000 miles for freight units and one year for switchers.

Electrical Shop

The Rock Island's electric shop at Silvis has done much to promote good maintenance of diesel-electric locomotives. Originally designed much like a manufacturing plant, it has developed excellent production-line maintenance methods, and was one of the first railroad shops in the country to do so. Traction motors in for clean-up follow one course through the shop, and these in for rewinding follow another. All motor parts are reconditioned and brought to standard size so as to be completely interchangeable in any motor.

The first degreaser for cleaning locomotive electric parts was produced in this shop by redesigning an existing model designed for other purposes. Many pieces of shop equipment—including some which have been adopted by manufacturers—originated in this shop.

This model shop has been used by the Association of American Railroads as the basis for plans for the "ideal electrical repair shop."

Car Shops

The shop at 47th street in Chicago is the Rock Island's one and only passenger car shop. All general repairs to all passenger equipment are handled here, along with all rebuilding or design changes. It is one of the most modern installations in the country, being of steel and brick construction with large portions of the wall area composed of hollow glass blocks.

Cars enter the working area through overhead sliding doors. There are ten tracks in the shop, including two in the paint shop which forms an integral part of this facility.

The eight repair tracks in the main shop are spaced on 25-ft. centers to provide ample clearance for tools and for the portable scaffolding used in place of permanent scaffolding installations. Each repair track has a series of electrical outlets for 440-, 220-, and 110-volt a.c. current for operating shotwelders, arc welders, and various other portable tools and hoists.

The paint shop handles all passenger car painting for the system, along with some diesel locomotive painting. The facility comprises two combination spraying and drying booths, each of which is supplied with clean, filtered air, equipped with a thermostatically controlled heating and ventilation system which maintains proper conditions for painting or drying, and filtering units for removing paint particles from the interior air. The effectiveness of the ventilation system is evidenced by its ability to accommodate as many as three men spraying inside a passenger car at one time. The booth is equipped with an elevator-type scaffolding, with a non-skid working surface, which extends the length of the inclosure on both sides. This permits different levels to be sprayed simultaneously without interference.

The Rock Island has followed a policy of purchasing most of its new freight cars. Shops at Blue Island, Silvis and El Reno have built new cars of most types at one time or another, but their principal work has been rebuilding older cars. One of the more recent and interesting shop projects was the construction of 50 pulp wood cars at Little Rock from old "U.S.G.A." box cars, using all reclaimed materials. El Reno has recently rebuilt 500 flat-bottom gondola cars and is now completing a program of 2,710 coal cars.

The "Twin Star Rocket" at Excelsior Springs, Mo.

The Spectacular "Rockets"

New passenger trains, faster schedules, dramatize the "New Rock Island"; cut costs and increase revenues

The move that caught the public eye, and dramatized the fact that the Rock Island had really taken a new lease on life, was the appearance of the first of a series of streamlined "Rocket" passenger trains in 1937. As the number of streamliners grew, and operations were expanded from the original Chicago-Peoria run, morale on the road shot up. It was the first time in decades that employees had something really new to talk about. Shippers looked on the then struggling railroad with a new interest. And passengers flocked to ride the new trains. Each run very quickly showed profits after out-of-pocket costs and the fleet soon became the hallmark of the reborn Rock Island.

The new streamliners' names were a logical outgrowth of the first passenger train ever to operate on the parent railroad. The original six-car train from Chicago to Joliet—just 100 years ago this month—was pulled by a wood-burning engine named "Rocket." The alliteration

New streamlined suburban cars, photographed at the 99th street station, Chicago, were purchased in 1949 as a part of a planned program of service improvement.

of the name "Rocket" with the road's popular name, "The Rock Island," made it a "natural."

Before the appearance of the new "Rockets," passenger service had been gradually deteriorating over a long period of time. On-time performance was notoriously poor, even though the trains had slow schedules to begin with. Equipment was badly outmoded, and in need of repair. Passenger revenues had made a spectacular fall from a high of nearly $30 million in the early 1920's to a low of less than $6 million in 1933.

A Railway Age portrait

"In those days, we had very little to sell," A. D. Martin, passenger traffic manager, recalls. "We didn't even have anything with which to hang on to our existing business." Mr. Martin's recollections on this score are apt to be pretty vivid because at the time he was a general agent of the passenger department in highly competitive Omaha, "beating the bushes" trying to get business.

E. M. Durham, Jr., senior vice-president of the Missouri Pacific, who had been hired by the Rock Island trustees as their chief executive officer, and Mr. Farrington, then the chief operating officer, both knew that the morale of all employees was "shot," and *esprit de corps* simply did not exist.

"The hardest thing we had to do," Mr. Farrington recalls, "was to live down the Rock Island's reputation. After six months, Mr. Durham and I recommended the purchase of six streamlined trains. The railroad had to reestablish its identity with the public. I was sure the new trains would do it. I was fairly sure they would be self-supporting because they would permit operating economies, and attract new revenue."

That they accomplished this goal in liberal measure is a matter of record. In the first year the original trains earned $490,700, or 55 per cent on the original investment, after all direct expenses, including depre-

"There is a future in the railroad passenger business—but it lies in the direction of fast, comfortable service between metropolitan centers which are far apart—too far for a comfortable automobile or bus ride." A. D. Martin, general passenger traffic manager.

The "Rocky Mountain Rocket"—which was inaugurated in 1939 against all advice of outside railroaders—is today one of the road's best earners. The Colorado Springs section is pictured here.

ciation and interest on the investment. These trains completely paid for themselves within three years.

The original fleet has been steadily expanded by the addition of new trains wherever ample potential exists. The newest addition to the fleet came on January 4, 1948, when the "Golden State" was completely streamlined with the most modern equipment, and placed on a new 45-hour schedule, Chicago to Los Angeles, 4 hours and 15 minutes faster than before.

The "Rocky Mountain Rocket" was inaugurated in 1939—against all advice—between Colorado Springs-Denver and Chicago. Although it operates with a three-hour handicap in comparison with the Burlington and Union Pacific routes, the train has paid off handsomely, and is today one of the road's best earners. It operates on what is undoubtedly the tightest passenger schedule on the railroad, with some eighteen intermediate stops at which mail and express are handled. Offsetting its weaker position in the highly competitive Denver market, the Rock Island is strongly entrenched in Colorado Springs as the only line with direct service to and from the east. The Rock Island's close association with the Broadmoor Hotel interests has worked to the mutual advantage of both parties. Both the railroad and the hotel have worked to build up a year-round business, and the records for the past few years show that this goal has been largely achieved. The "Rocky Mountain Rocket," which started as an 8-car train, now averages between 14 and 16 cars, winter and summer.

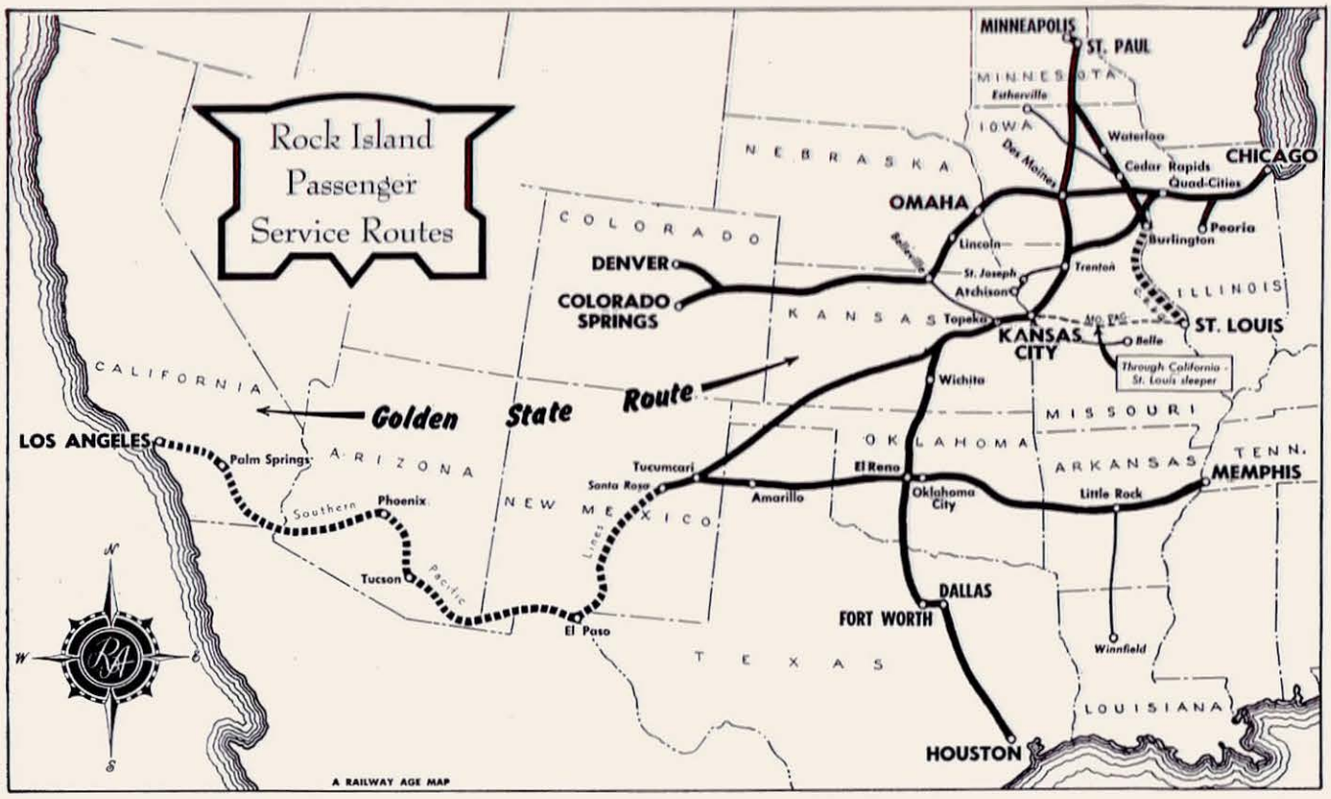
On January 14, 1945, just before the end of World War II, the existing combination of trains by which through service was provided between the Twin Cities and Texas was replaced by a new streamliner, the "Twin Star Rocket." Inaugurated at a time when new passenger equipment was unobtainable, the train was outfitted by shuffling cars on existing trains, and operated with a number of dressed-up standard cars until newer equipment could be obtained. Its 1,363-mile route between Minneapolis and Houston is one of the longest north-south through passenger-train runs in the country and presents a number of unusual operating and mechanical problems. The same equipment must alternately operate in the intense below-zero cold common to the Twin Cities in winter and the 80-90 degree temperatures prevailing on the Gulf Coast.

The "Twin Star Rocket" is one of the best trains in the Rock Island stable with an enviable record of consistent year-round earnings. Traffic on this train varies very little from season to season.

Looking Ahead

"There is a future in the railroad passenger business," Mr. Martin believes, "but it does not lie in the direction of providing local services in thinly populated areas such as are served by the majority of our lines. It lies in the direction of fast, comfortable service between metropolitan centers which are far apart—too far for a comfortable automobile or bus ride."

This viewpoint is underlined by the success of the road's principal long-haul passenger trains: the "Rocky Mountain Rocket," "Twin Star Rocket," and the "Golden State." In looking over the road's potentialities for future passenger service development, both Mr. Farrington and Mr. Martin believe the greatest opportunities lie along the Golden State route (joint with the Southern



"The Spectacular Rockets" were introduced at a time when the biggest problem was, as Mr. Farrington puts it, "To live down the Rock Island's past reputation." They accomplished this goal in liberal measure.

Pacific) which traverses the rapidly growing Southwest—New Mexico, Arizona and southern California.

The Rock Island's only territory with sufficient potential intermediate-type traffic to support passenger services at present-day costs lies on the line between Chicago and Des Moines, and on the Peoria branch. Elsewhere, revenues to support services must come from long-haul traffic between major metropolitan centers—as between the Twin Cities and Kansas City, and between Chicago and Colorado—or from traffic to and from connections, such as on the "Golden State" between Chicago and California, or on the "Zephyr-Rocket" between the Twin Cities and St. Louis.

Local "Rocket" Service

Good service is maintained where there is adequate local business available: witness the "Peoria Rockets," the "Des Moines Rocket," and the "Corn Belt Rocket."

In recognition of the inescapable fact that the market for branch-line passenger service is largely a thing of the past, and that the Post Office Department is abandoning the use of railroads in favor of trucks for handling local mail, the road's passenger department has taken the lead in a drive aimed at the discontinuation of all local passenger services on main and branch lines which are not productive. How successful this drive has been over the past three years is illustrated by the accompanying map. Service has been completely abandoned (except for "caboose service" on freight trains) on some eighteen secondary and branch passenger lines, with service remaining on but five.

Aided by the fact that most of the equipment in use in the early thirties was in such poor condition that it had to be scrapped, the Rock Island can today lay claim to having one of the most modern fleets of passenger equipment in the country. Of its 260 main-line passenger-carrying cars, 139 or 53 per cent, are modern streamlined cars.

Completely Dieselized

Complete dieselization of regularly scheduled passenger service was achieved last March, when the last regularly assigned steam passenger engine on Trains 43 and 44 was replaced by a two-unit diesel.

Revenue trends on main-line passenger trains remain favorable, indicating there is a good market for modern long-distance train service. Gross passenger-service revenues (including "head-end" traffic) for the year 1951 were 13 per cent over the previous year, and for the first 7 months of 1952 have shown a slight improvement over 1951, in spite of a 30 to 40 per cent decline in military traffic.

The road's revenue per passenger (including commutation) increased from $1.69 in 1950 to $1.82 in 1951; average revenue per train-mile (including mail, express, etc.) increased from $2.73 in 1950 to $2.87 in 1951; and average revenue per passenger-carrying car-mile increased from $.39 to $.42 in the same period. In 1951, the average distance per passenger climbed to 79 miles, the highest of any year since 1945, reflecting the increasing number of long-distance passengers handled.

An extensive suburban service is operated in the Chicago area between LaSalle Street Station, Blue Island and Joliet. A "five year plan" for the improvement and modernization of this suburban service was launched in 1949 with the receipt of 20 new, streamlined, high-capacity suburban coaches, equipped with pneumatically operated sliding doors, and forced, filtered air ventilation.

Twelve of the cars are also equipped with propane-powered air-cooling units. The latter are assigned to the "blue ribbon" commuting train which makes the 40-mile run between Joliet and Chicago in 50 minutes. In addition to buying new cars for this service, the 115 older suburban coaches, which are in good mechanical condition, are being gradually modernized and improved. The most recent betterment was the increased dieselization of the service last December, using Alco-G.E. and Fairbanks-Morse general-purpose road switchers, and Electro-Motive road units. It is expected the service will be completely dieselized within the next year.

Suburban stations have likewise received careful attention. Large, ornate buildings, which no longer serve any useful purpose and are expensive to maintain, have been replaced by attractive, efficient modern structures. A number of the better older stations have been modernized.

The road's management believes that more new suburban stations have been built, and more suburban stations modernized on the Rock Island than on any other principal commuting road in recent years.

These improvements are a part of a program designed to improve suburban service revenues and reduce suburban service expenses for the express purpose of reducing the annual loss incurred by the system in its operation.

These measures have augmented revenues, and attracted new commuter patrons. Likewise, in spite of spiraling costs, the operating expenses of this service have been trimmed substantially. Notwithstanding these achievements, in the year 1951 the service produced a $1½-million deficit on an out-of-pocket basis.

Suburban Communities Growing

"We recognize the importance of suburban service to the many communities along our line in the Chicago area," Mr. Martin emphasizes, "and it is our intention to provide the very best service the traffic will support. However, suburban traffic is not growing to the extent most people think it is," he continues. "New work opportunities are springing up in local areas, and 'downtown' department stores are opening suburban branches. All this reduces the need for suburbanites to journey downtown."

Over $9 million has been spent for the purchase of new passenger cars since 1936. The extra-fare "Golden State"—newest streamliner in the Rock Island fleet—leaving Chicago's La Salle Street Station for its 44¼-hour run to Los Angeles (in conjunction with the Southern Pacific).

The "Hardest Railroad in the U. S. To Operate"

—And the Man Who Does It

The Rock Island system, President Farrington has often declared, is the "hardest railroad in the U. S. to operate," because of its far-flung main and branch lines, because it has no concentration of heavy traffic in any prescribed area, because of the varying needs of its diversified traffic originating in widely spaced industrial and agricultural areas, and because of the volumes of bridge traffic moving to and from connecting carriers at all points on the system. The task of operating this railroad now rests with Downing B. Jenks.

In addition to conducting the day-to-day operations of the railroad, he must effect the transition of the "New Rock Island" from its first phase—rehabilitation and restoration as a vigorous, strongly-growing property—to its second phase—building a strong organization and effecting a long-range program of refinement of property and service.

Firm and speedy measures were needed in 1937. A vigorous, capable centralized organization was about the only way such a major rebuilding task could have been accomplished so speedily. This achieved, Mr. Farrington recognizes the desirability of strengthening divisional organization. That change is in progress today.

D. B. Jenks, who is 37, is one of the youngest men to hold a post of equivalent responsibility with a major American railroad. A graduate of Yale University with a B.S. degree in industrial engineering, he first went to work for the Pennsylvania in the engineering department. Then he went to the Great Northern, serving successively as a roadmaster, division engineer, trainmaster and superintendent. In 1942 he joined the Military Railway Service, rising from first lieutenant (assistant car service superintendent) to lieutenant colonel (assistant general superintendent) in theatres in Europe and Africa. On October 1, 1948, he was appointed general manager of the Chicago & Eastern Illinois, being elevated to the rank of vice-president the following May. He was called to the Rock Island as assistant vice-president on December 16, 1950, and was appointed vice-president on July 1, 1951.

Downing B. Jenks *A Railway Age portrait*

Training Program

Inasmuch as the strength in a divisional organization rests on the capabilities of *many* men, the Rock Island has embarked on an extensive long-range managerial training program. This program, under the direction of C. L. Franklin, assistant vice-president, has four goals: (1) providing existing employees with training in the proper use of the tools of their trade, (2) interesting capable college graduates—particularly graduates with a family background of railroading—in joining the Rock Island, (3) screening all job applicants to eliminate those who might become undesirable employees, and (4) providing deserving employees who have suitable backgrounds with a developmental training program designed to familiarize them with all phases of railroad operation. The various operating unions have given this program their active support.

College Graduates Sought

The program is well underway. All present employees, including the management officers, are now being given medical examinations and being screened and evaluated by system officers specializing in this work. And this fall and winter Mr. Franklin will commence his rounds of the nation's colleges seeking graduates who might be interested in joining the CRI&P in addition to the continuing program of selecting present employees for training and promotion.

All superintendents, assistant superintendents and trainmasters (as well as mechanical officers) are being sent to training school so that they can become more intimately familiar with the mechanical construction and operation of diesel-electric locomotives. This, backed

The famous 5000-class 4-8-4 steamers helped "bring the Rock Island back" and turned in remarkable records of performance. By the end of 1953, there will be but 20 road steam engines left on the system.

by Mr. Jenks' personal project for helping his operating people get more and better use out of diesels, is making it easier for every superintendent to improve his own operating performance.

Increased Tonnage Possible

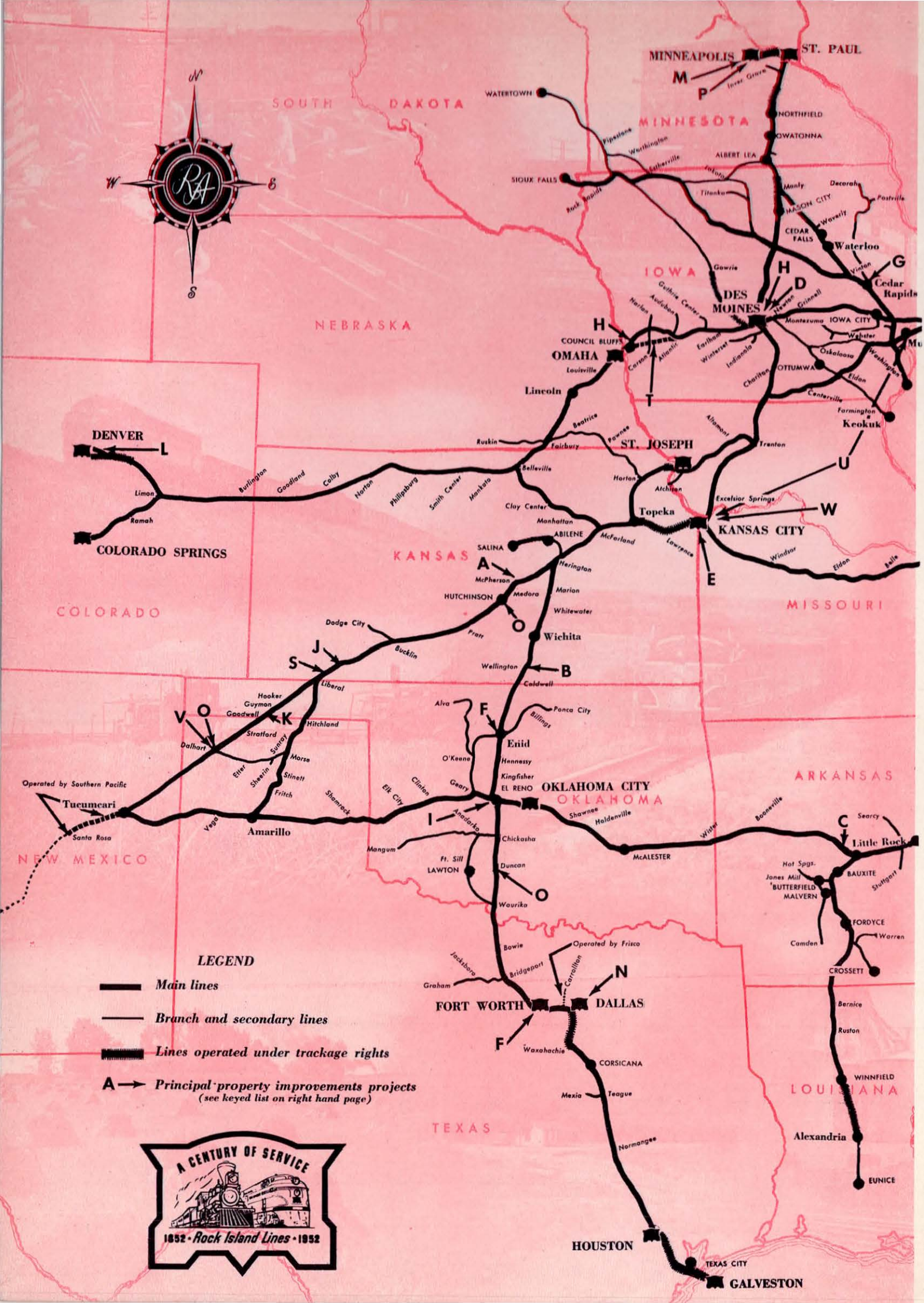
It is Mr. Jenks' theory, backed by experience on both the GN and C&EI, that most railroad operating people tend to (1) underrate the potentials of their diesel power, and (2) allow a large "margin of safety" in addition. Last January he went over the entire system prodding his superintendents to get out and see—through road tests of their own—what their motive power actually could accomplish. Most found they could handle considerably more tonnage, with no important sacrifice in schedule or performance.

The Rock Island is now extensively dieselized, with approximately 85 per cent of its passenger train-miles, 75 per cent of its freight-miles, and 77 per cent of its switching-hours performed by diesel power during the first half of 1952. The 30 Electro-Motive GP-7s (general purpose road engines) and 11 800-hp. switchers now on order will wipe out practically all remaining steam operations on most of the system. It is currently planned that by the end of next year (1953) steam ownership will be reduced to 20 5100-class 4-8-4 road engines and 10 300-class and 10 275-class switch engines, all operating out of Burr Oak (Chicago). These engines will be used on the Chicago and Rock Island divisions during the annual grain and perishable rushes, releasing diesel road-switchers for use on other parts of the system.

The fact that the Rock Island is a fast-running railroad which can move perishable and merchandise traffic at remarkable average speeds is not always appreciated. The 1,108 mi. line from Tucumcari to Chicago is now a "race-track" 0.50-per cent-grade line over which through trains move on short schedule.

Long Range Program

While Mr. Jenks does not face the heavy physical rebuilding job borne by his predecessor, W. H. Hillis, he has definite ideas concerning a long range program for gradually improving the physical property still further by the addition of more chatt or slag ballast, continuation of the present tie-renewal program, a continuing long-range program of laying heavier rail, further grade and line changes where economically justifiable, and improving yard, terminal and other facilities.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Inver Grove
WATERTOWN
SOUTH DAKOTA
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NORTHFIELD
OWATONNA
ALBERT LEA
Pipestone
Worthington
Fairmont
Tracy
SIOUX FALLS
Rock Rapids
Manly
Decorah
Titonka
MASON CITY
Postville
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Newton
Grinnell
Montezuma
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Louisville
Carson
Atlantic
Earlham
Winterset
Indianola
OTTUMWA
Oskaloosa
Washington
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Centerville
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Kingfisher
EL RENO
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Tucumcari
Santa Rosa
Vega
Amarillo
Shamrock
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LAWTON
Duncan
McALESTER
Hot Spgs.
Jones Mill
BAUXITE
BUTTERFIELD
MALVERN
Stuttgart
NEW MEXICO
O
Waurika
FORDYCE
Camden
Warren
Bowie
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Jacksboro
Bridgeport
Carrollton
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FORT WORTH
DALLAS
CROSSETT
Bernice
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Waxahachie
CORSICANA
WINNFIELD
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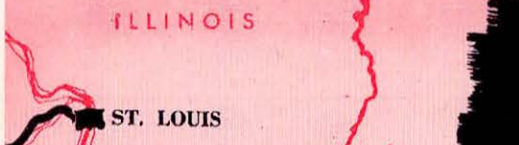
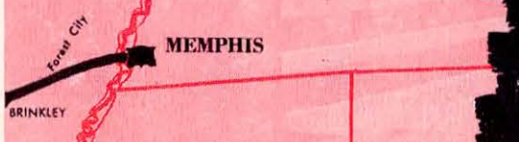
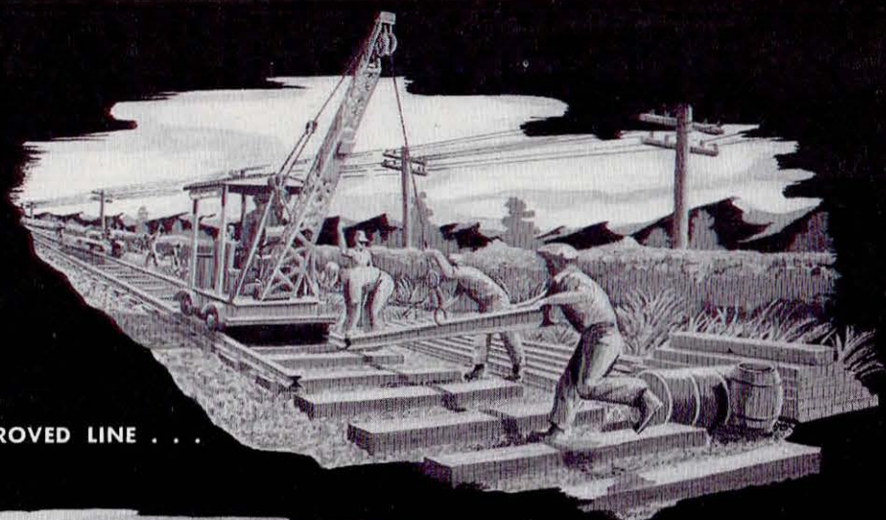
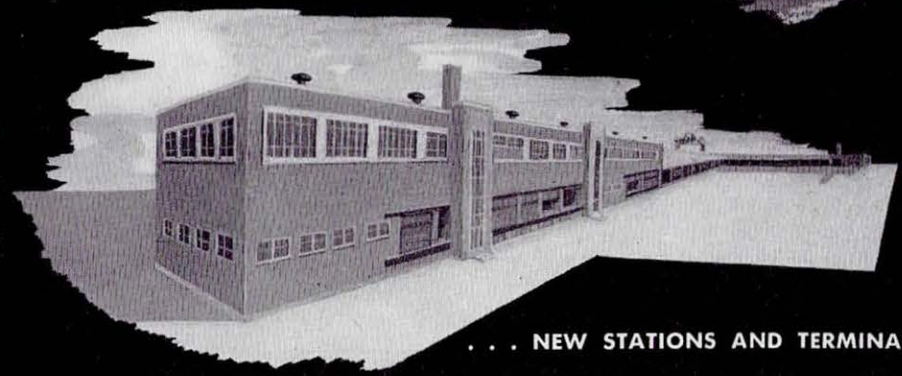
EUNICE
HOUSTON
TEXAS CITY
GALVESTON
A CENTURY OF SERVICE
1852 • Rock Island Lines • 1952
LEGEND
Main lines
Branch and secondary lines
Lines operated under trackage rights
A → Principal property improvements projects
(see keyed list on right hand page)





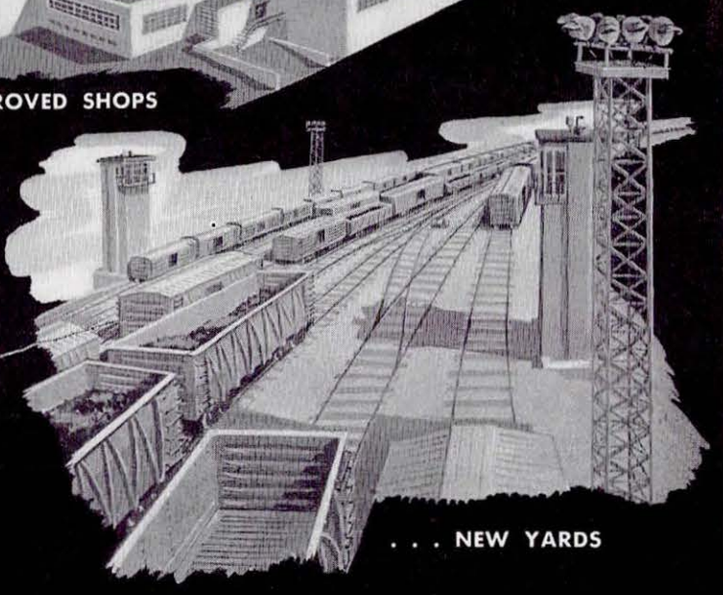


IMPROVED LINE . . .



. . . NEW STATIONS AND TERMINALS

. . . NEW AND IMPROVED SHOPS



. . . NEW YARDS

BUILDING THE NEW ROCK ISLAND

A pictorial presentation of the Chicago, Rock Island & Pacific Railroad Company on its 100th birthday, October 10, 1952, showing principal property improvements, projects undertaken in the past 15 years. Not shown . . . but nonetheless equally important . are the new, and more efficient equipment (locomotives, freight cars and passenger cars), and the modern communications and signalling equipment acquired during this same period.

A 4 miles of new line
B 3½ miles of new line
C 1.1 miles of line relocated
D 1½ miles of new line
E New retarder hump yard
F Additional yard tracks
G New freight warehouse
H New Yard
I Shops modernized
J Grade reduced on 1.8 miles of line
K Grade reduced on 1.6 miles of line
L New 4-mile freight cut-off
M New fruit and produce terminal
N New freight station and facilities
O New passenger station
P New "Rocket" servicing terminal
Q Passenger station modernized
R New express terminal and garage

S 8¼ miles of new line and new Cimarron bridge
T 34½ miles of new line under construction
U 102 miles of new line and new Harry S. Truman bridge
V New icing machine with additional tracks
W Produce terminal enlarged; new freight station and facilities
X New coach repair shop; new research lab; new diesel shop under construction

"Sampson of the Cimarron"—this new bridge, and its new line approaches, symbolize the beginning of the Rock Island's program of "planned progress."

Short Cuts to Operating Economy

Major line and grade revisions and progressive maintenance policies have been significant factors in reducing costs and improving service

By 1936 the once prosperous Rock Island was but a shadow of its former self. The memorable crash in the stock market in 1929 and the ensuing general economic collapse were enough of themselves to rock strong railroads. But in the fall of 1931 a great drought struck the Rock Island's territory—much of which soon became known as the "dust bowl"—with devastating effect.

As a result of the combined general economic collapse and repeated crop failures, the management had little choice other than to let deferred maintenance accumulate, until by 1936 over $4½ million had been accrued

in deferred current maintenance of track and structures alone. With but a few exceptions, track and bridges were so weak they could not accommodate such heavy power as the railroad already owned. "When I first inspected the railroad," Mr. Farrington relates, "it was painfully obvious that the railroad could never be operated economically without strengthening track and bridges, and without effecting a few crucial line changes."

E. M. Durham—then chief executive officer—and Mr. Farrington mapped a program for strengthening the existing line sufficiently to accommodate the modern 4-8-4 steam locomotives which the railroad already owned, a large number of which were in storage because of their inability to operate on all but a few lines because of weak track and bridges. This program received the approval of the trustees and the court, and work was started in 1937.

At that time the trustees had very little cash with which to finance capital improvements, and they were not anxious to borrow large sums until the railroad demonstrated an improved earning power. So the program began with one of the most intensive scrap drives ever seen on any railroad. Everything along the system that could be salvaged for scrap was turned in and sold, or reclaimed for use in new structures. Cash raised in this manner financed the first bridge strengthening program, and the purchase of heavier rerolled rail.

Gradually, mile by mile, heavier rail was laid on main tracks, and bridges and track structures were strengthened. This made possible increased use of heavy power, reducing train-miles, cutting helper expense, and permitting the scrapping of older, less efficient engines, greatly simplifying locomotive maintenance. The cost of the initial line-strengthening program was completely recovered in reduced operating expenses within a very few years.

Looking back, Mr. Farrington observes that the bridge-strengthening program may now seem to have been less important in the face of the growing influence of the diesel, and its lesser bridge strength requirements. Nevertheless, the program was responsible for dramatic reductions in operating expenses at a time when such reductions were desperately needed—and it was the greatest single factor which enabled the road to turn in its remarkable record of performance during World War II.

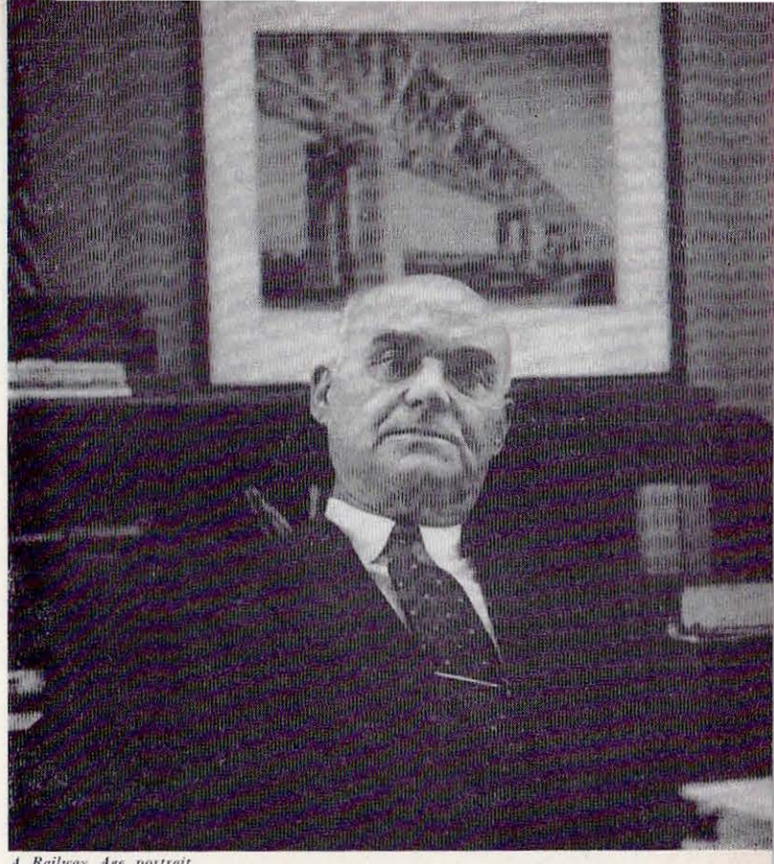
At about the same time, a number of line changes and improvements were mapped for the purpose of eliminating the use of helper engines, and increasing engine capacity on particularly difficult sections of road.

"Sampson of the Cimarron"

The first of the many line changes instituted to improve operating efficiency is the 8.43-mile Arkalon cut-off, replacing an 11.99-mile section of line which meandered into the deep valley of the Cimarron river between Kismet, Kan., and Hayne. The new line includes an imposing five-span high level bridge across the valley of the Cimarron, which has been nicknamed, dramatically, the "Sampson of the Cimarron."

This project was instituted while the road was still short of capital with which to finance such a major undertaking. "We literally built that bridge from scrap," Mr. Farrington relates. "By tearing down and selling every remaining bit of scrap we could find on the entire railroad, we provided the funds with which it was built."

The old line presented a severe handicap to efficient operation—especially because the 0.8 per cent grade against the heavier eastbound movement made helper service and the splitting of tonnage trains mandatory. Of an even more serious nature, however, were the frequent, costly washouts and heavy recurring charges for protective work which resulted from the low-level river crossing. The valley of the Cimarron is visited frequently by storms of cloudburst intensity, causing devastating floods which travel as high as 200 miles a day. As a result, the river is unusually difficult to control.



A Railway Age portrait

An operating man known for his competence and fairness, W. H. Hillis, now senior vice-president, shouldered the detailed task of physically rebuilding the property and modernizing its operating practices. It was under his direction that the Rock Island turned in outstanding records of performance during World War II.

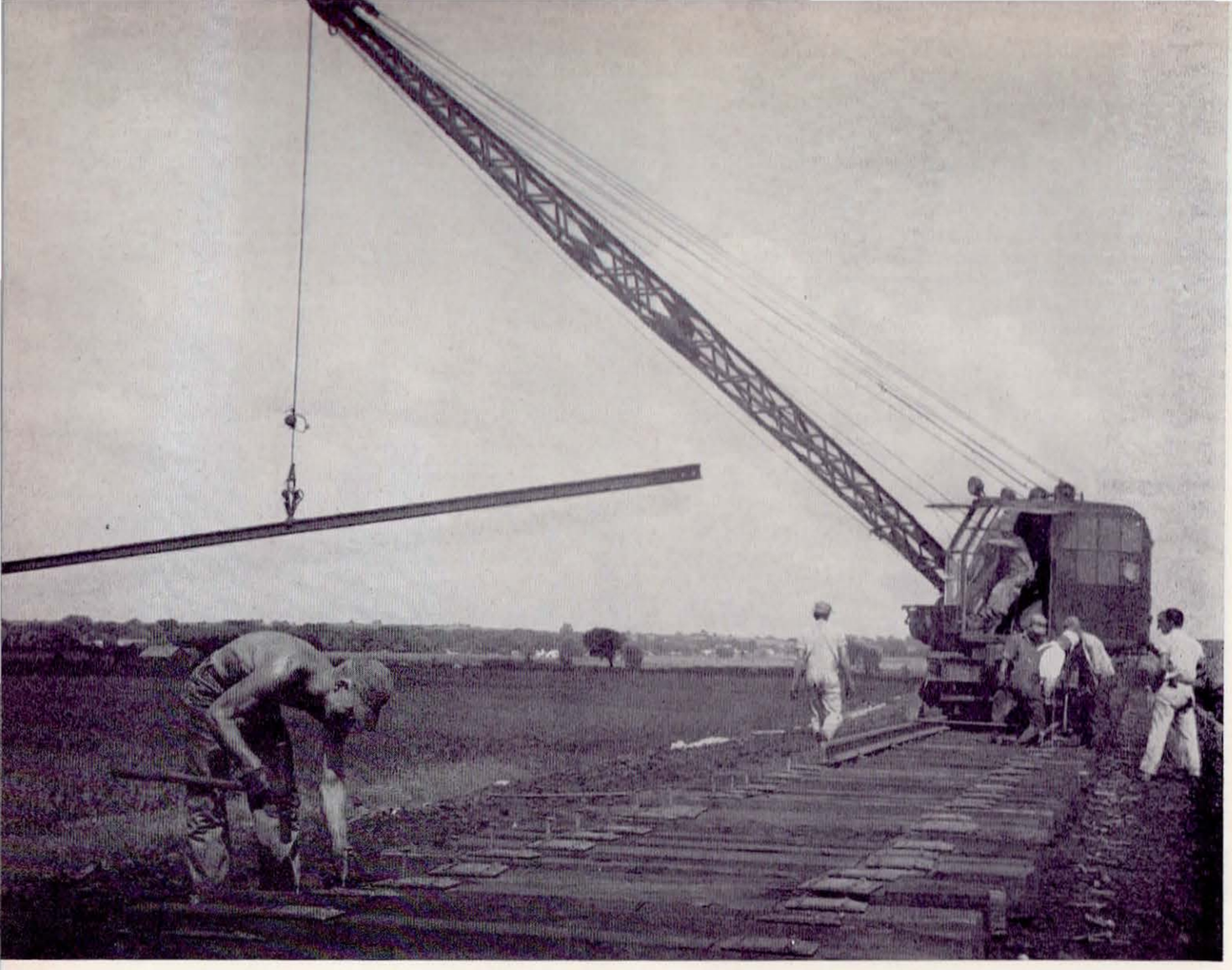
Construction of the new line involved moving approximately 2.9 million cubic yards of grading in making descending cuts to the new crossing, and in building fill sections up to 95 feet high at the approaches to the new bridge. The work was completed in record time; all grading and masonry construction was completed in approximately 6 months' time, and the bridge superstructure was erected in approximately 85 days.

As the first major undertaking of the new management, the "Sampson of the Cimarron" has become a symbol of the new Rock Island and of its policy of "planned progress."

California Route

The Rock Island's original line between Chicago and Kansas City had curves as sharp as 7 degrees, and grades up to 1.6 per cent. Studies made by the Reconstruction Finance Corporation in the early 1930's indicated that the probable cost to the Rock Island of moving a given amount of freight between Chicago and Kansas City was 15 per cent greater than that of its principal competitor, the Atchison, Topeka & Santa Fe.

Almost since the line was originally built into Kansas City, the Rock Island had planned to reduce grades and improve curvature on portions of this line, and relocation surveys were made at various times between 1906 and 1930. However, none was actually consum-



The first rail being laid on the new Atlantic cut-off at Hancock Junction, providing connection with the Carson branch. Grading on the project is now a little over half way to completion.

mated. Except for one minor relocation made about 1912, the location was substantially as originally constructed in 1869.

Community Service Continued

Fortunately, most of the bad characteristics were concentrated in about 325 miles of line between Davenport, Iowa, and Kansas City. The R.F.C. studies indicated that the best solution to this problem would be for the Rock Island to build an entirely new line over most of this route. Mr. Farrington was inclined to agree and probably would have proceeded accordingly had not local political pressures, resulting from the fact that the new line would skip most of the intermediate cities and towns then served, necessitated a change in plans. An alternate plan was developed, eliminating most of the seriously objectionable stretches of track, but not altering the route sufficiently to effect service to any important communities. Work on the undertaking was divided into small projects and undertaken during the period 1941 through 1946—including a three-year period of forced interruption during the war.

That portion of the line from Allerton to Kansas City is also used as an integral part of the "short line" from Minneapolis and Des Moines to Kansas City and Texas. Accordingly preferred attention was devoted to this segment, by constructing 15.10 miles of new line between Mercer, Mo., and Mill Grove to eliminate 411 degrees of curvature including 6-degree curves and a 1.58 per cent grade. To improve entrance to Kansas City and eliminate sharp curvature and the turning of passenger trains, the Rock Island joined with the Milwaukee in constructing 4.52 miles of new line, and the imposing new Truman bridge crossing the Missouri river. Together, these two projects reduced the mileage between Allerton and Kansas City by 3.29 miles. Incidentally, the Truman bridge was awarded a plaque by the American Institute of Steel Construction as one of the nine most beautiful bridges built in the United States between 1942 and 1947.

Between Davenport and Allerton 82.75 miles of new line were built in seven separate projects, which included elimination of severe curvature and sharp grades. The old line included many 4-degree curves and grades ranging from 1.09 to 1.60 per cent. A total of 2,714 degrees of curvature and 883 feet of rise and fall were eliminated, which work involved moving 8,470,000 cubic yards of grading. The total distance saved was 11.1 miles.

This entire Davenport-Kansas City project cost approximately $12 million to complete, and is conservatively estimated to have entirely paid for itself in operating economies in the seven years it has been in service.

There were several other smaller projects on the line between Chicago, Kansas City and Tucumcari, N. M., designed to increase engine capacity and improve train performance on this most important route. They include the construction of 1.29 miles of new line at La-Salle, Ill., and 3.98 miles at McPherson, Kan., to reduce curvature and grade. And the ruling grade was lowered on 1.78 miles of line between Advance, Kan., and Fowler from .80 to .50 per cent, and on 1.52 miles of line in the vicinity of Imogene, Kan., from .80 to .50 per cent.

The collective result of these projects is that the Rock Island can now be said to offer strong competition to all carriers operating in this territory. It is now able to haul, without helper service, trains of over 6,000-tons from Tucumcari to Chicago, 1,108 miles.

In 1945, on the line from Herington, Kan., to El Reno, Okla., 4.16 miles of track was relocated to eliminate 107 degrees of curvature, including several 3-degree curves.

The Colorado Line

At the time Mr. Farrington came to the Rock Island, serious consideration was being given to abandoning the line from Omaha to Colorado, and relegating the line from Des Moines to Omaha to secondary status. Mr. Farrington, backed by the traffic department, believed this segment had sufficient undeveloped potential to merit rebuilding. As rapidly as possible he strengthened the track, laid heavier rail and imporved the ballast to permit operation of high speed freight trains which could meet the competition of other lines. These trains attracted traffic. Then, as rapidly as funds could be made available following completion of essential projects on the California line, attention was devoted to reducing curvature and grade on the Colorado line to improve its performance characteristics. Among other things, 1.48 miles of new line was built to eliminate a stretch with difficult curves and grades near Colfax. Iowa.

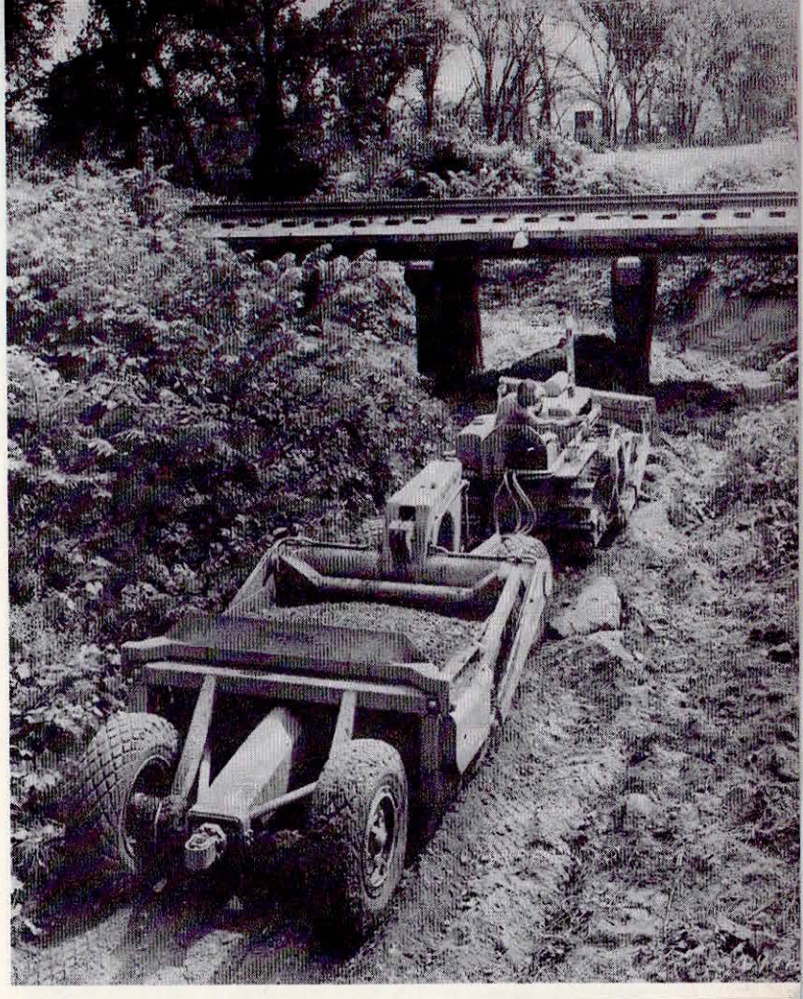
At Denver local and transcontinental freight traffic is interchanged with the Union Pacific and the Denver & Rio Grande Western. The Rock Island obtains entrance to Denver by operating rights from Limon, Colo., over Union Pacific tracks.

In 1950, the Rock Island undertook construction of the new 3.75-mile Sandown cut-off at Denver designed to give its through freight trains direct access to the D&RGW North yard. This new cut-off simplified the movement of transcontinental freight, and cut hours off Rock Island transit time through this gateway.

The most recent project—and the largest single one yet undertaken by the road—involves construction of 34.66 miles of new line between Atlantic, Iowa, and Council Bluffs currently under way, and the acquisition of 11.67 miles of new trackage rights over the Chicago Great Western.

This new 46.33-mile line will replace an old 56.53-mile single-tracked line having a total of over five complete circles of curvature (including several 4-degree curves) and a series of undulating grades ranging up to a maximum of 1.6 per cent. In all, 1,629 degrees of curvature and 127 feet of rise and fall will be saved by this new line. It will shorten the route into Council Bluffs by 10.2 miles in addition to eliminating a troublesome stretch which restricted both schedules and train capacity.

In addition to the larger construction projects enumerated here, in the past 15 years there has been a system-wide program for improving and rebuilding bridges wherever necessary to remove traffic restrictions or reduce maintenance costs. Likewise portions of line subject to flood waters—and the Rock Island has many lines paralleling rivers which flood each spring—have been relocated or raised so as to prevent interruptions to operations due to floods, and to reduce the continuous and large expenditures for repairing damage caused by high water. The total capital cost of all these improvements and betterments to track and bridge structures alone amounts to better than $40 million in this 15-year period. Observers outside the railroad estimate that these investments have shown an average rate of return slightly better than 10 per cent.



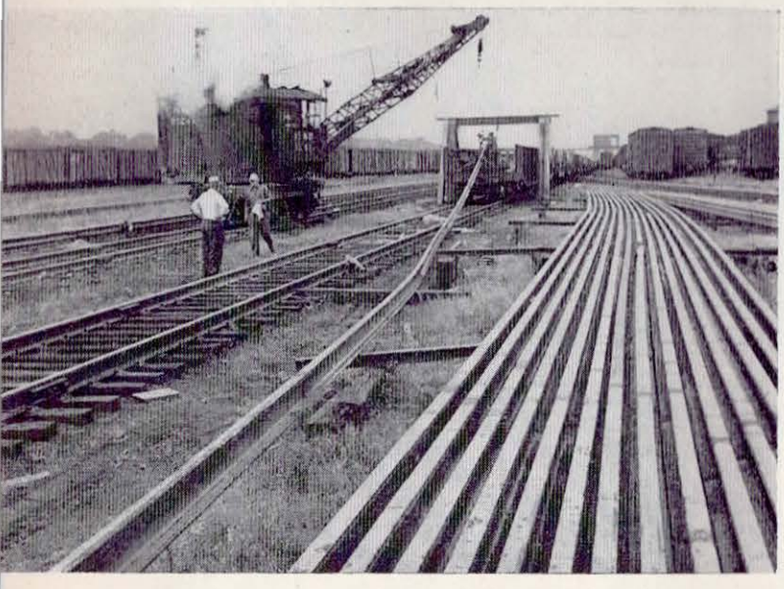
Intensive use of off-track maintenance equipment helps the Rock Island get maximum value from every maintenance dollar expended.

A number of projects have been mapped for the years ahead. However, the railroad is now largely "over the hill" insofar as major line and grade revisions are concerned. There remains but one major project—bridging the Canadian river on the Amarillo-Morse (Texas panhandle) line to eliminate the grades and low level trestle at the present crossing—and that will probably have to await completion of plans for a federal dam in the vicinity. The other projects involve small portions of lines which need attention—no one of which is of major significance. But collectively they will make possible further operating economies and improvements in service.

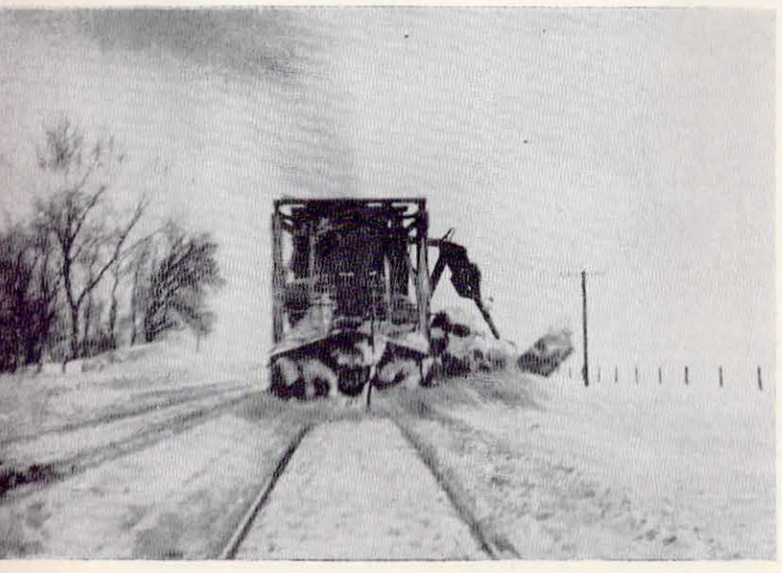
Progressive Maintenance

Experience gained during the difficult period 1929 through 1936, when deferred maintenance was allowed to accumulate rapidly, has made the present management—including the board of directors—most anxious to keep all maintenance strictly current, and not to allow deferred maintenance to accumulate. Yet rapidly mount-

Mobile track gangs are being equipped with new camp cars converted from old coaches. This crew, working near Council Bluffs, is "falling to" in one of the new meal cars.



Five track miles of welded rail have been laid on the eastbound main at Peru, Ill. Conventional 39-ft. rails were welded into 1,500-ft. lengths at Silvis and loaded onto a special train of 40 flat cars for movement to Peru.



All-star performance is obtained from maintenance machines, especially such dual-purpose units as this Type-A Jordan spreader-ditcher shown here flanging snow from a main track near Manly, Iowa. Ditching in the summer and plowing snow in the winter, this machine never rests.

ing costs—and inability to increase revenues in the same proportion as costs—have made careful scrutiny of maintenance expenses essential. This has been accomplished, without sacrificing the quantity or quality of work done, through the creation of mobile, mechanized maintenance gangs.

Improvements in track maintenance methods in intervening years, due largely to the availability of mechanical equipment for most operations, together with the greater strength built into the track and road structure in recent years, suggested a need for further reorganization of maintenance forces to take the fullest advantage of these improved tools and methods, and to minimize the adverse effects of increasing costs.

New Program of Maintenance

Studies undertaken by the engineering department at the suggestion of Mr. Farrington and Mr. Hillis led to the creation of a new program of maintenance based on the use of larger, mobile gangs.

Essentially the new plan involves: (1) lengthening the individual sections; (2) abolishing track supervisors; (3) placing patrol and light work (such as tightening bolts, repairing switches and fences, light spotting, etc.) in the hands of a section foreman with a 2-man crew; (4) creating mobile maintenance gangs headquartered in camp cars, but assigned to definite territories embracing two or more sections, depending upon local conditions; (5) equipping gangs with trucks and mechanical maintenance equipment; and (6) providing camp cars for each gang.

The new mobile gangs are equipped to put in ties, take care of surfacing work, install ballast, put in side or industry tracks, handle drainage, and generally carry forward complete maintenance of the assigned territory.

When the plan was started in 1949, it was estimated to require $1 million for new mechanical equipment and camp cars, and that it would save about $611,000 annually—recovering its entire capital cost within two years. The plan is in effect over the entire railroad. New cars to replace old bunk cars are being furnished as rapidly as old coaches can be secured and converted.

By designing these mobile gangs to obtain maximum use from mechanical equipment, it is possible to give the men in each gang more extensive training in its proper use. It has made it possible for men to serve an apprenticeship to their foreman in the supervision of mechanized operations—something that could never be attained under the old section gang system. This is making available a reserve group of potential mobile-gang foremen, and is offsetting the problem of the increasing shortage of skilled section foremen evident in all parts of the country.

Corollary Advantages

Benefits not anticipated at the outset have been realized through the use of this maintenance system. These are primarily during times of emergency, such as following a wreck or during a flood, when the services of a large number of men are needed at a single point. Under the new system, all that is necessary is to dispatch a work train—or arrange for a local freight to move the camp cars to the site of the emergency. There the crew can remain—comfortably "at home"—until the emergency is passed and maintenance work incidental to it has been accomplished. The savings resulting from the elimination of emergency forces, and trucking men back and forth on overtime has been substantial.

Rock Island Motor Transit Operations

Highway subsidiary provides coordinated rail-highway truck service, and feeder bus service

The bus which provides connections between Peoria and Bureau, Ill., for the "Golden State" at the Bureau station awaiting passengers arriving on the eastbound train. The Motor Transit Company also operates an important feeder bus service between Owatonna and Rochester, Minn.

Over 5,000 route-miles of highway service are operated by the Chicago, Rock Island & Pacific's highway subsidiary—the Rock Island Motor Transit Company—to provide better merchandise service to shippers in many areas served by its rail lines, to improve job security through the retention of traffic, and to control costs. The extent of this line's highway operations is indicated by the fact that it operated over ten million vehicle miles in 1951, in spite of hampering restrictions imposed by the Interstate Commerce Commission.

An important feature of the RIMT is that it has been providing a peddler-type local service to and from smaller towns and cities and handling smaller shipments. Independent motor truckers in Rock Island territory have found this type of business unprofitable and have, in effect, largely withdrawn their services, leaving RIMT as the principal transportation company maintaining this essential service. This is particularly true in Iowa where there are many small industries—often situated in small towns. An interesting result of this situation is the substantial interchange business that has arisen with other truck lines on motor-billed freight, as the other truckers route their "peddler business" via RIMT.

Pick-Up and Delivery Services

In addition to operating a truck business for its own account, and handling railroad merchandise traffic in coordinated truck-rail service, the RIMT operates pick-up and delivery services, under contract with the railroad, at 96 different points on the system. It also operates three relatively small bus routes for the account of the railroad to provide feeder connections for main-line passenger trains.

Rock Island Motor Transit was organized in 1927 to operate a rail-substituted shuttle service between downtown Chicago and the railroad's principal Burr Oak (Blue Island) yard. It was not until 1937 that the new management brought in by the trustees saw in highway truck operations an opportunity to expand and improve service—particularly for merchandise and other "small-lot" shipments—as well as making possible substantial operating economies.

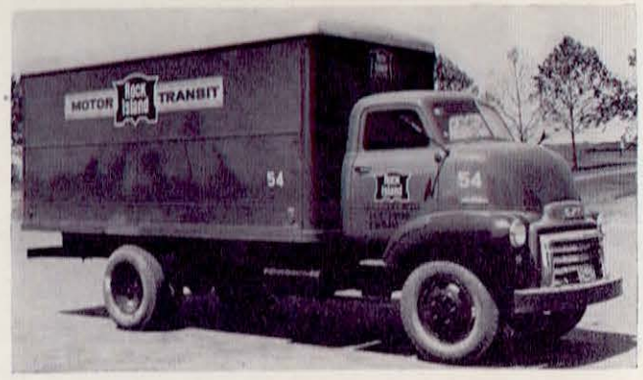
Operations were gradually expanded during the period 1937 through 1948 by acquiring additional operating rights and certificates, both in the name of the railroad and of the truck company. Inasmuch as all of the railroad's rights, with but one exception, have been assigned to the truck company, it operates under motor rights along with substitute rail service rights.

I.C.C. Policy Changed

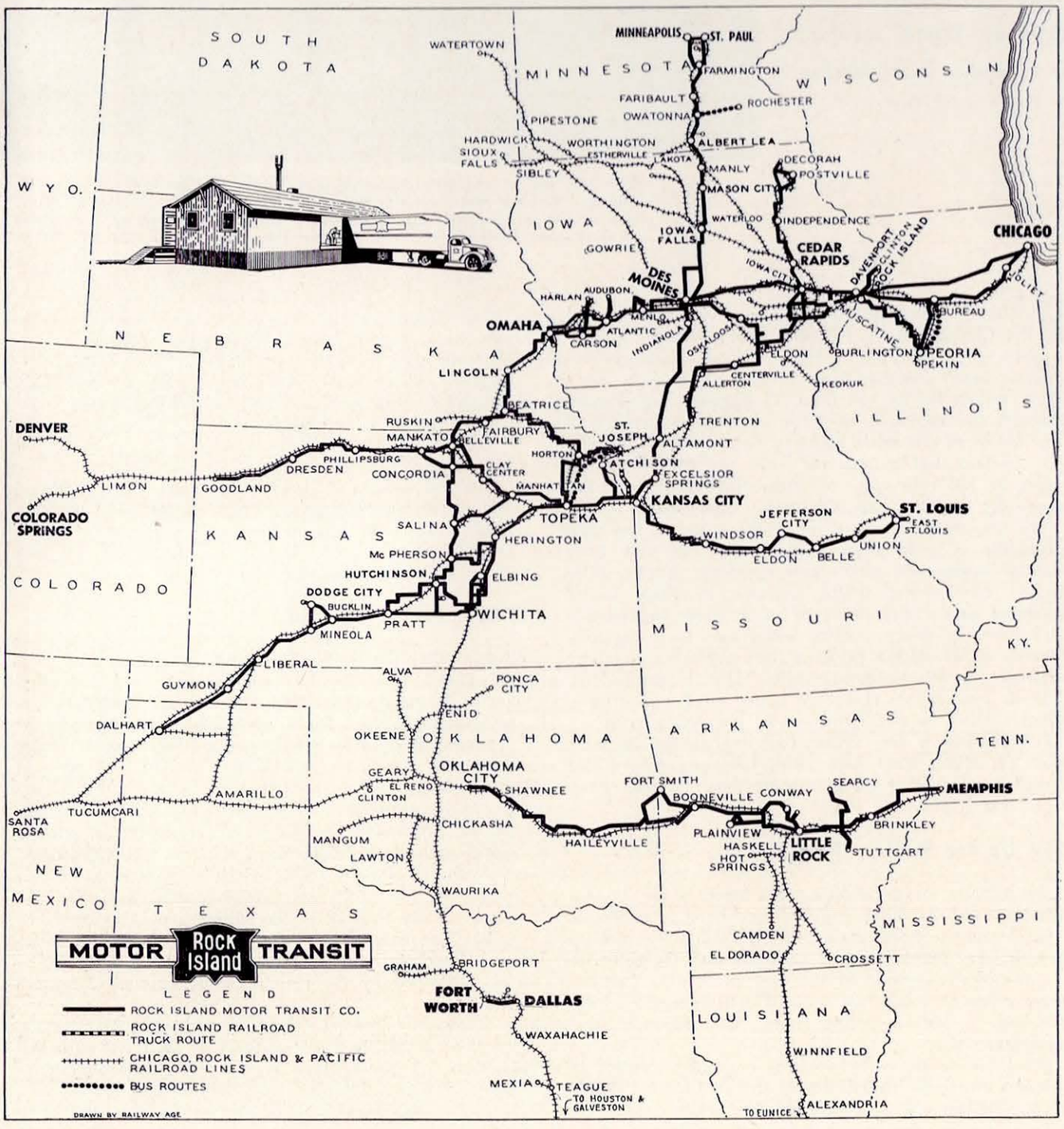
In 1938, the railroad bought—with authority and permission from the Interstate Commerce Commission—the business of the White Motor line operating between Omaha and Rock Island-Chicago, including its unrestricted right to handle motor-billed freight. Under the rights so acquired, the RIMT handled both rail and motor-billed freight. In 1946 the Interstate Commerce Commission in effect called back the White Line certificate purchased by the RIMT, replacing it with a certificate establishing "key points" and eliminating motor-billed freight rights entirely. Inasmuch as this wiped out the basic value of the certificate to the railroad—to say nothing of the shipping public—the Rock Island has carried the case through the courts. However, the commission reaffirmed its decision in 1949 and was sustained by the United States Supreme Court in 1950.

When they learned the I.C.C. order would have the effect of depriving many of them of their last principal operator of peddler-type service for small shipments, Iowa shipping interests and RIMT employees independently succeeded in obtaining temporary relief as to

A diesel tractor with a 36-foot tandem axle trailer of the type used for over-the-road operations.



A small panel truck of the general type used to provide pick-up and delivery service.



one key point requirement and to the extent of allowing RIMT to handle motor-billed freight up to 5,000 lb. per shipment.

A Large Truck Fleet

The Rock Island Motor Transit Company, which operates under the direction of W. F. Peterson, general manager, with headquarters in Des Moines, Iowa, owns a fleet of almost 700 vehicles, as follows:

224 tractor units
313 semi-trailer units
150 pick-up trucks
4 service trucks
4 passenger buses

All heavy and major repairs are handled at the company's model garage in Des Moines. Built in 1947-8, it has 23,000 sq. ft. of floor space and is equipped with the latest tools for the maintenance and repair of highway vehicles. The installation also includes a large storeroom for parts and supplies for the entire truck system. Small garages which handle servicing and repairs are maintained at Chicago, Davenport and Hutchinson.

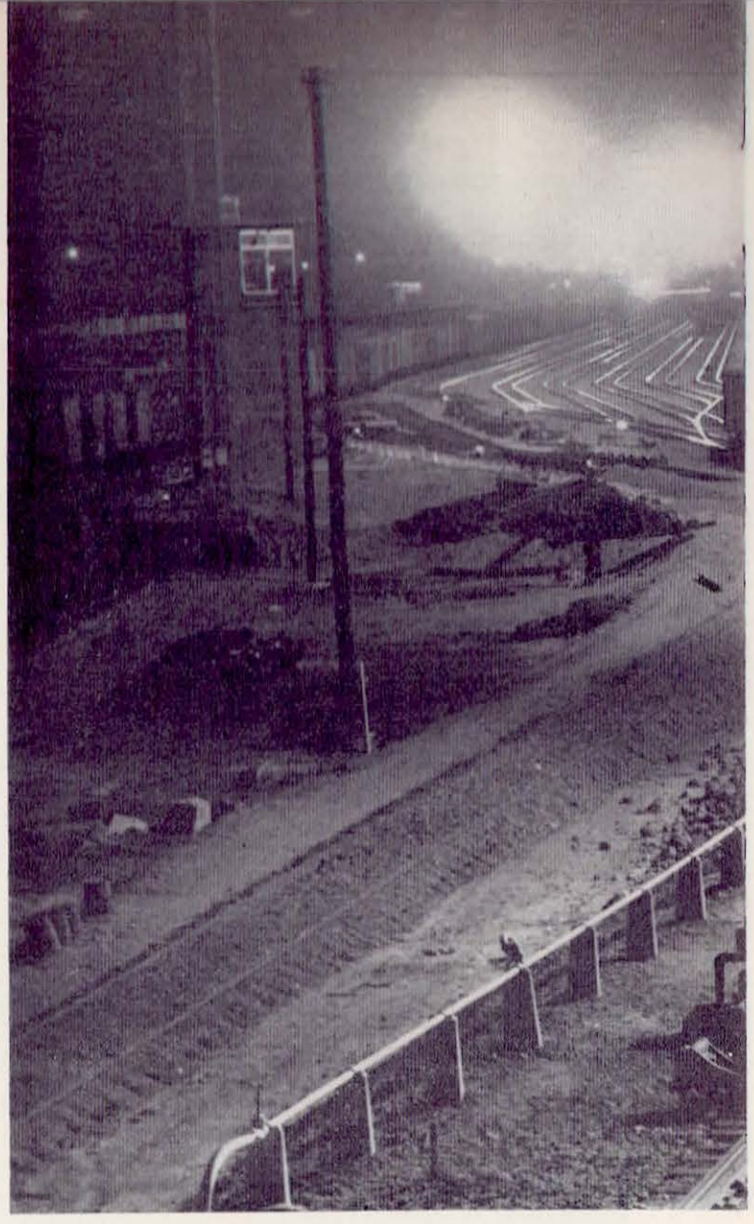
In addition to handling its normal freight and passenger business, the RIMT operates a number of trucks for the railroad to handle head-end traffic, relieving through passenger trains from the necessity of making frequent and time-consuming stops to accommodate this traffic. Instead, it is now handled between selected transfer points and many of the smaller communities by truck. This arrangement has resulted in improved service—both between major traffic centers and into and out of the smaller intermediate towns.

The RIMT is headquartered in this modern, fully equipped garage at Des Moines, where suitable tools are provided for maintenance and heavy repairs.

The fully equipped machine shop, "heart" of the repair center at Des Moines.

Breaking Terminal Bottlenecks

How the Rock Island utilizes new and modernized yards, terminals and stations to expedite the movement of traffic



As Rock Island traffic grew—due both to the great Pacific War, the industrial development of the West and the Southwest, and the aggressive operating and sales policies of the railroad—yards and terminals which once had been fully adequate became restricting orifices through which all traffic had to be forced under innumerable difficulties. As key projects for the strengthening and improving of principal lines—which necessarily received primary attention—were completed, attention was turned to the problem of yards and terminals.

Since 1935 over $6½ million in capital funds have been spent improving yards and attendant facilities for the sole purpose of speeding traffic and reducing costs. Included are the two "show piece" yards at Armourdale (Kansas City) and Silvis (Quad Cities) which were extensively rebuilt in 1949 and 1950, being converted into hump-retarder yards, equipped with most of the latest devices for improving operating efficiency and reducing costs.

A number of smaller—but nonetheless important—yard improvement projects were undertaken over the entire railroad at about the same time. Two new flat yards were built at Council Bluffs and Des Moines, Iowa, while older yards at Fort Worth, Little Rock, Peoria, Enid and Chicago (Burr Oak) were improved by increasing the length of arrival, departure and lead tracks, by adding new trackage, or by installing modern communications systems. The next principal project "in the cards" is the yard at El Reno, which is being studied for possible conversion into a retarder-operated "baby hump" yard.

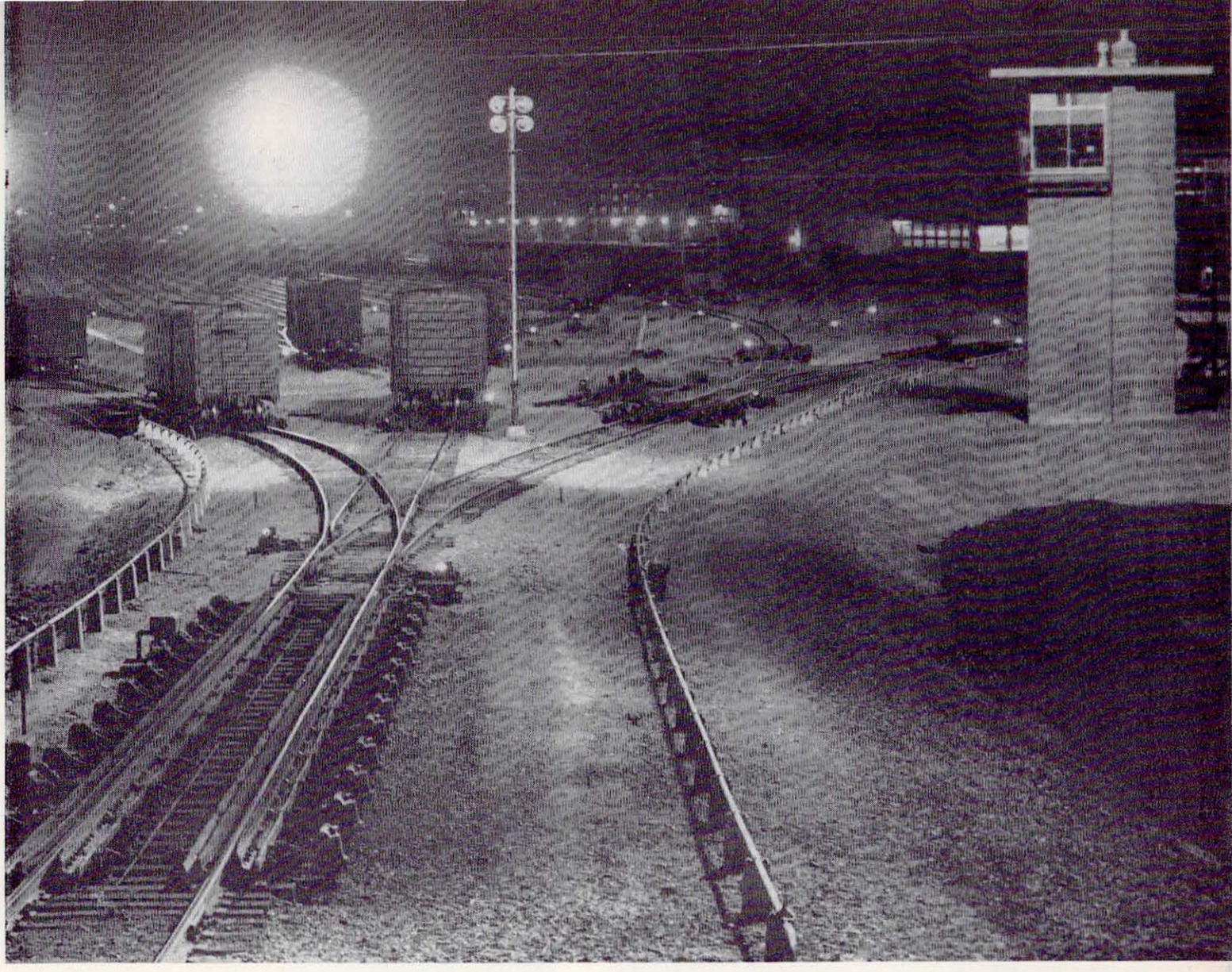
The provision of proper and adequate freight stations has likewise received careful attention, over $1½ million having been expended for this purpose. Earlier this year, a new combination office building and freight transfer terminal was opened at Armourdale in a new structure designed for fire resistance and minimum maintenance costs, and built with an eye to possible future expansion. Other smaller projects include building a new freight station at Dallas, converting an old freight station at Minneapolis into the largest, best-equipped "under cover" produce terminal in the Twin Cities, and improving smaller installations throughout the system.

Armourdale Yard

Experience during the war years indicated the need for modernization of the three existing Armourdale (Kansas City) yards to relieve congestion and speed up movements; and to reduce operating costs by greater efficiency. Because of its location at the "hub" of the Rock Island system, astride the key routess between Chicago and California, Minneapolis and Texas, and St. Louis and Colorado, this is the most important single yard on the railroad. This yard also handles interchange traffic with 11 other railroads, in addition to sizable local business for Kansas City itself, particularly during the annual grain rush.

Communications Blanket

Over $1½ million was spent in converting the three yards formerly in service into a single, modern integrated operation including a 39-track hump-retarder classification yard with a daily capacity of 4,000 cars, with receiving and departure yards capable of handling 125-car trains without doubling. The former icing dock was moved, and its efficiency was increased by the installation of two Rico platform icers on the upper deck. Communications blanket the yard—radio, talk-back speakers, paging system speakers, pneumatic tubes and an intercommunications system are all in use in the interest of efficient operation. Radio provides direct communication between the two yard offices, and between the yard offices and switching locomotives operating within a 15-mile radius. An unusual feature of the talk-back speaker system is a hook-up by which a car



Over $6½ million in capital funds have been spent since 1935 in improving yards and attendant facilities for the sole purpose of speeding traffic and reducing costs. This rebuilt yard at Armourdale is one of the largest.

checker using any of the talk-back speakers can converse directly with a car clerk in the general yardmaster's office without interrupting use of the remainder of the system by yard crews. Waybills are shunted about the yard by a pneumatic tube system which links the east and west receiving yards and the icing dock with the main yard office. And an "inter-com" system is used to link the retarder operating towers.

This yard now handles an average of about 120,000 cars a month, although volume reaches a peak of 150,000 cars a month at the height of the grain and cantaloupe movements.

Substantial operating economies have followed completion of the rebuilt yard, and cars are now moving through the yard in about half the time formerly required. It is estimated that the new yard has returned the cost of the improvement in the two years since its completion.

The Silvis Yard

The second yard rebuilding project was the conversion of the important yards at Silvis to a modern retarder-operated hump yard. This work was completed in 1949 at a cost in excess of $3½ million. An important element in the decision to modernize this yard was the effect a modern operation, in connection with the system-blocking of cars which it would make possible, would have on the Burr Oak yard in Chicago, and on yards in Des Moines, Cedar Rapids, and Council Bluffs. The work at these yards was simplified by discontinuing much outbound classification work at Burr Oak, and mine-running cars to Silvis, where a more complete segregation of cars by traffic groups both speeded the handling of cars and reduced work at the other terminals.

The old yard at Silvis had three track-groupings, together with a large engine terminal and shops, and extensive car repair facilities. Because tracks were short, the capacity of the whole yard was only 2,780 cars, and a great deal of time was lost in doubling trains. The daily average of cars through the terminal prior to its reconstruciton was 1,656 cars, particularly because the yard arrangement was such that switching movements frequently conflicted with one another. The rebuilt yard has a handling capacity of 2,500 cars a day (on a single-count basis).

The three existing yards were reconstructed into a large receiving yard for traffic from all directions, a 40-track hump retarder classification yard, and departure yards.

This yard, like that at Armourdale, is equipped with modern devices for improving operating efficiency, and

is blanketed by extensive communications systems, including talk-back speakers, a paging system, radio, intercommunications systems, and a pneumatic tube system. The yard is constructed so cars can be pushed directly from the receiving yard over the hump into the classification yard. Eleven electro-pneumatic car retarders are used to control the movement of cars from off the hump. As a part of the modernizing program, the icing house dock was extended to give a track capacity of 30 cars.

Service Speeded

The effect of modernizing the yards at Armourdale and Silvis was to improve the Rock Island's competitive position by speeding up service—in some cases as much as 30 hours—in addition to permitting substantial operating economies.

In April of this year operations commenced in the new combination freight transfer terminal and office building built adjacent to the Armourdale yard. This new building is serving four separate functions:

(1) A modern freighthouse and transfer facility for the Rock Island Motor Transit Company

(2) A railroad freighthouse serving Kansas City and vicinity

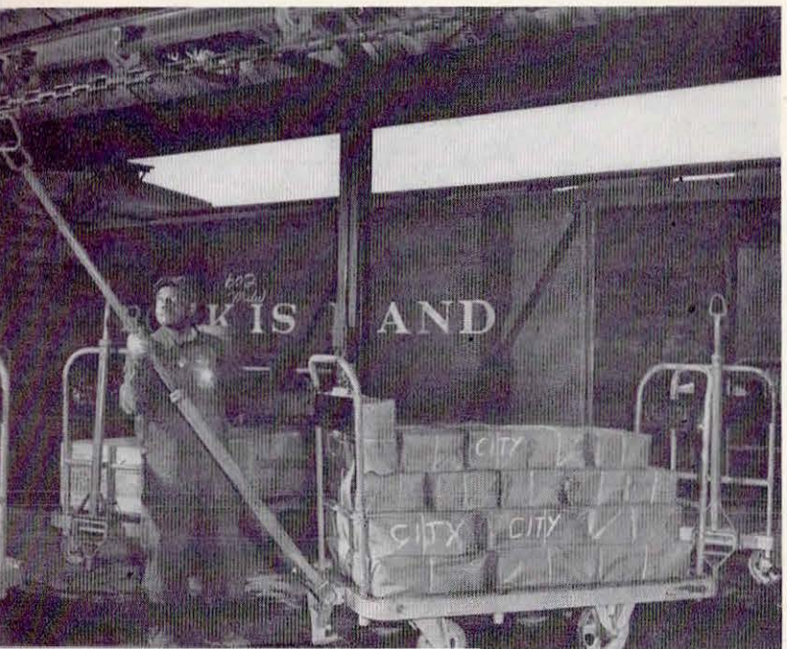
(3) A major rail-to-rail and truck-rail transfer terminal, and

(4) A new "office building" close to the divisional operating center at Armourdale.

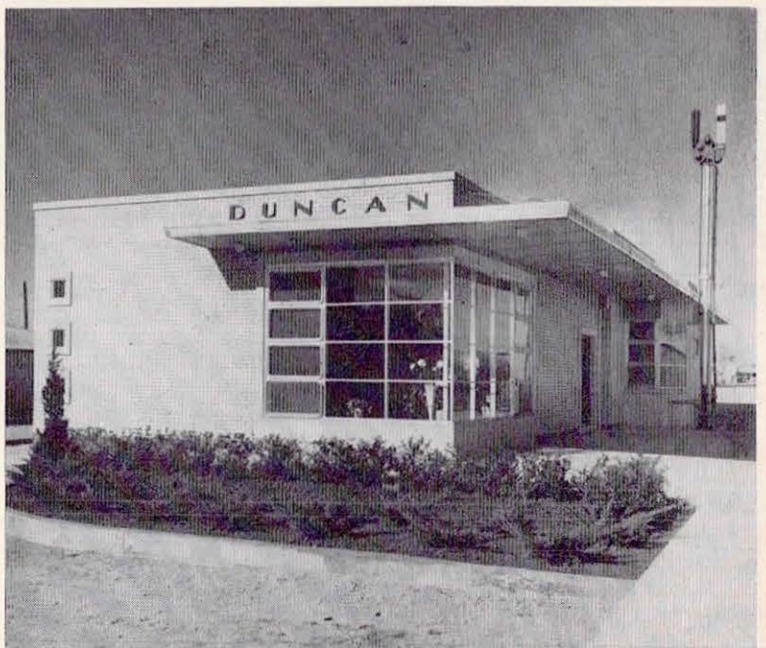
The new Armourdale and Silvis retarder-hump yards are equipped with most proven devices for improving operating efficiency. This operator at Armourdale controls the primary retarders at the foot of the hump.

Communications blanket new and modernized yards. The 40 talk-back speakers in the Armourdale eastbound receiving yard are connected with the yardmaster's office. The microphone is tied in with a 10-speaker paging system.

An endless overhead truck-tow conveyor is a feature of the new freight transfer completed last spring at Armourdale. The facility is designed to handle about 450 tons of merchandise freight in one 8-hour shift. The work is performed by 56 men.



Passenger stations have come in for practical attention, too. Older, hard-to-maintain, and excessively large buildings have been torn down to make room for more compact modern buildings. In several cases, provisions have been made in these buildings for freight and operating offices.



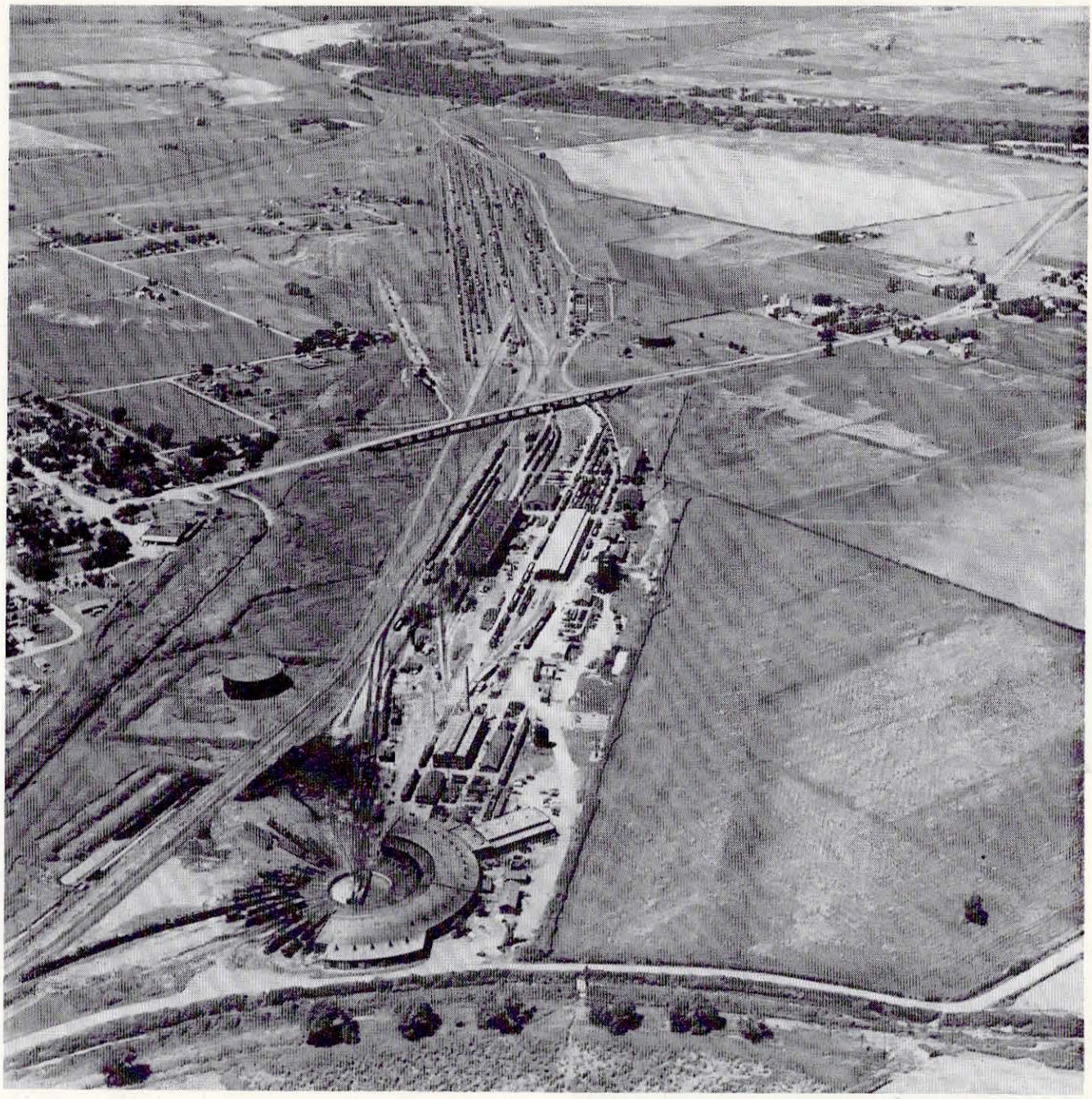
The freight transfer portion of the facility is designed to handle about 450 tons of merchandise freight in one 8-hour shift. The work is performed by 56 men (not including the agent's office employees). Normally 55 to 60 per cent of the freight handled is Kansas City transfer freight.

Overhead Truck-Tow Conveyor

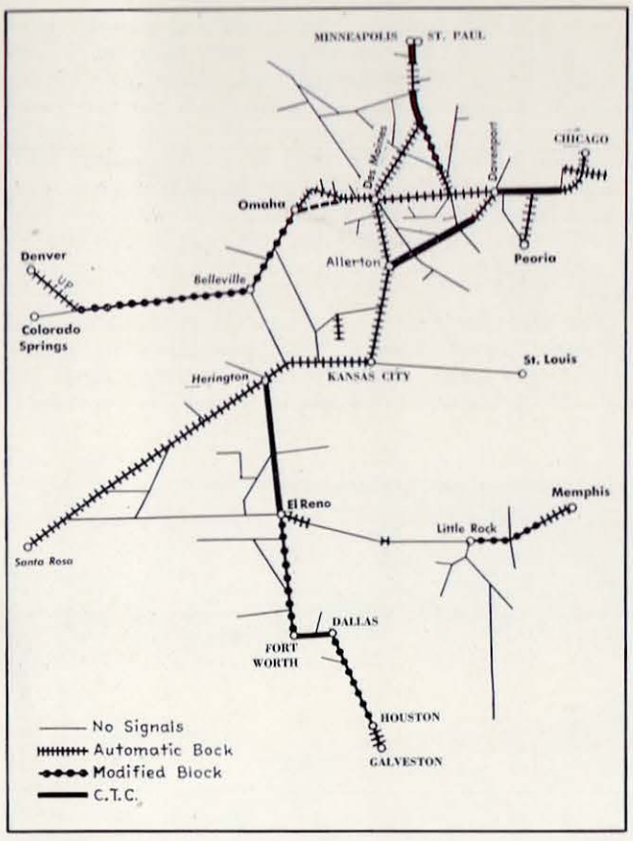
A 1,333½-ft. endless, overhead truck-tow conveyor operates counter-clockwise along the two platforms and over two enclosed crossovers, including a lift bridge over the one open end between platforms. This tow line will handle 100 trucks at synchronous speeds of 120, 90 and 70 feet per minute.

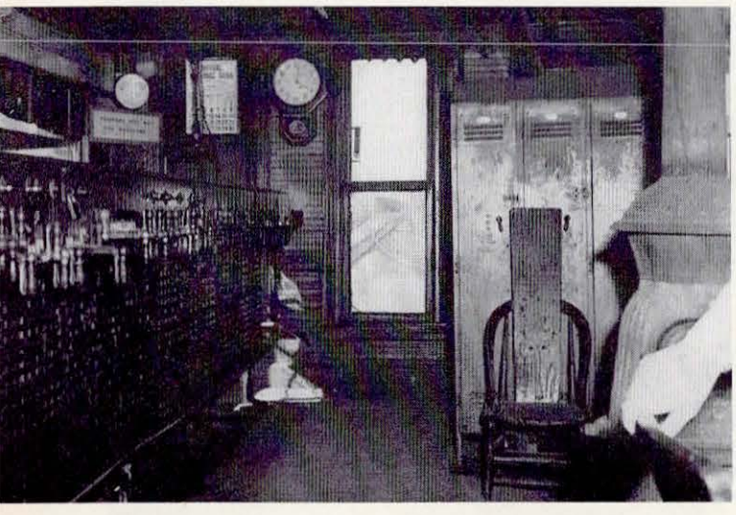
A centralized checking system, utilizing portable talk-back speakers which are plugged into receptacles conveniently spaced about the platform, places the checkers in the dock office on the first floor. Each checker works in a sound-proofed area equipped with a control console by which he can establish and break connections with the platform receptacles with which his console is connected. Each console may be connected with any four of the outlets on the platform. The system includes 10 paging speakers linked with a microphone in the foreman's office.

The office building incorporated in the structure has permitted consolidation of district operating, communications and traffic offices formerly scattered about the city—in high rental areas and in inadequate quarters.



The yard at El Reno is currently being studied for conversion to a "baby-hump" type operation. This aerial view shows the large second district shops as well as the large engine terminal, now in the process of being converted for diesel operations. El Reno is situated at the intersection of two important Rock Island main lines.





Outmoded equipment is being replaced with modern, efficient equipment. The manual interlocking at Gresham (Chicago) is being replaced by a modern plant.

Driving conduits under Vincennes Avenues, Chicago, for the Gresham interlocking installation. The welded pipe is driven through behind a pneumatically driven auger.

Modern Traffic Control

For Better Performance, Greater Track Capacity

Ingenuity in designing block signal and C.T.C. installations for medium traffic territory at minimum capital expense

Efficient signals and signal systems have been one of the most important tools used by the Rock Island to achieve better service and operating performance and to achieve greater track capacity at a very minimum of expense. And the road's signal engineers have displayed unusual creative abilities in adapting standard signaling equipment to their particular needs.

"When I came to the railroad in 1936," Mr. Farrington reflects, "there were practically no signals, except between Chicago and Omaha, and between Davenport and Herington—and those were pretty well out-moded. Now those signal systems have been completely modernized, and about 3,000 miles of new signaling added."

By the exercise of ingenuity and employment of modern equipment, the Rock Island has been able to justify and install centralized traffic control and simplified automatic block systems on lines where traffic would not justify the expense of more conventional installations. And every one of these installations is so made that, should future traffic increases ever make expansion necessary, it can be accomplished with minimum expense.

These installations have had a two-fold effect: first they have made possible substantial operating economies, and second, they have contributed to marked improvement in schedule performance, and thereby better service to the shipper.

Automatic Block

One of the very first projects undertaken by the "new" Rock Island, in its program of building and improving its line, was the complete rebuilding of the existing automatic block system between Davenport and Omaha, and between Davenport and Herington. Signals were respaced for higher speed operations, and many old semaphore stands were replaced by modern three-position, color-light signals. Circuits were revised to provide overlapping protection for the operation of the new high-speed "Rocket" passenger trains. At the same time, the same standard A. P. O. block arrangement was extended to cover the 463 miles of line from Herington to Tucumcari, where there previously had been no signals.

There was no signaling on the 490-mile single-tracked line from Omaha to Limon, Colo., traversed by several fast passenger and freight trains. All movements were authorized by timetable or train order. Although the volume of traffic on this section of the line was not heavy, by 1946 it was considered desirable to provide some additional protection against collisions, and to check broken rails and switch positions. Traffic density

was not large enough to warrant the expense of a completely automatic block system.

To meet this need the signal and operating departments worked out an unusual single-track automatic block system which would provide the desired protection at a very minimum of cost. The number of signals required was reduced by the introduction of a simplified arrangement of station-to-station blocks, without intermediate signals. Construction and maintenance costs were further reduced by a novel application of coded track circuits developed by the signal department which confines the controls to the rail, thus eliminating the use of line wires between sidings. As much of this area is subject to ice, sleeting and high winds, this arrangement precludes signal interruptions in case of line failures.

The entire project was completed at an average cost of $1,706 per mile, as compared with approximately $3,000 a mile—at prices then prevailing—for conventional automatic block signals.

This installation proved so successful in actual operation that the same principle was applied two years later in the installation of simplified automatic block on the 201-mile single-track line between El Reno and Fort Worth.

A similar simplified automatic block system is now in process of being installed on the 212-mile line between Waxahachie, Tex., and Belt Junction (Houston).

The Rock Island now has automatic block signals on 3,404 miles of track, 2,991 miles of road.

Centralized Traffic Control

Extensive use has been made of centralized traffic control by the Rock Island to increase track capacity and improve operating performance. There are now 17 such installations on the railroad, covering 760 miles of track and 648 miles of road.

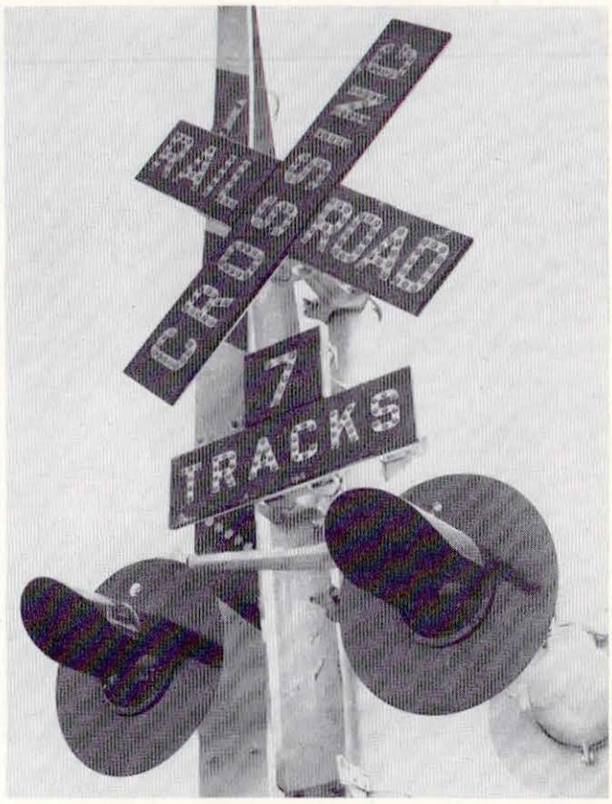
The Rock Island was one of the pioneers in developing the use of C.T.C. for authorizing train movements in *both* directions on *both* tracks in double-tracked territory, enabling faster trains to run around slower ones without either being required to wait in a siding. This double-running C.T.C. arrangement is in effect for 46 miles between Blue Island, Ill., and Morris (up to 100 trains daily); 13 miles between Spring Valley, Ill., and Bureau (about 50 trains daily); and 24 miles between Atkinson, Ill., and Silvis (about 45 trains daily)—all on the main line between Chicago and Rock Island.

A Medium-Traffic Installation

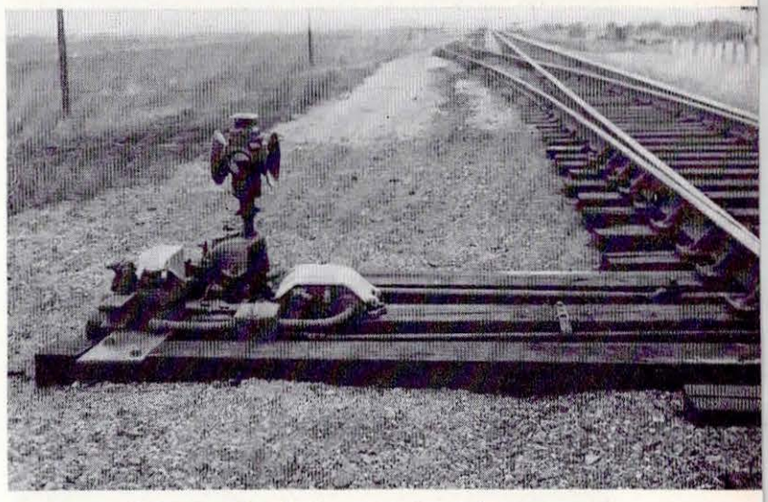
An outstanding example of getting the greatest benefit from the least practicable expenditure for centralized traffic control is the Rock Island's installation between Herington and El Reno. This installation was planned and authorized in 1947 on the basis of an average daily traffic ranging between 12 and 15 trains a day. But since the installation was completed, it has been handling—without difficulty or further additions—between 16 and 20 trains daily, with peak movements of 25 trains.

Before the installation, movements over the single-tracked line were authorized by timetable and train orders. There were no block signals. The sidings used for passing trains averaged 4 to 4½ miles apart. An important factor in justifying the installation of C.T.C. on this line was that only 19 out of the 34 existing sidings would be required for its operation. Some of the intervening sidings were removed; others were left in place for emergency use.

The entire 231-mile operation is controlled by a single

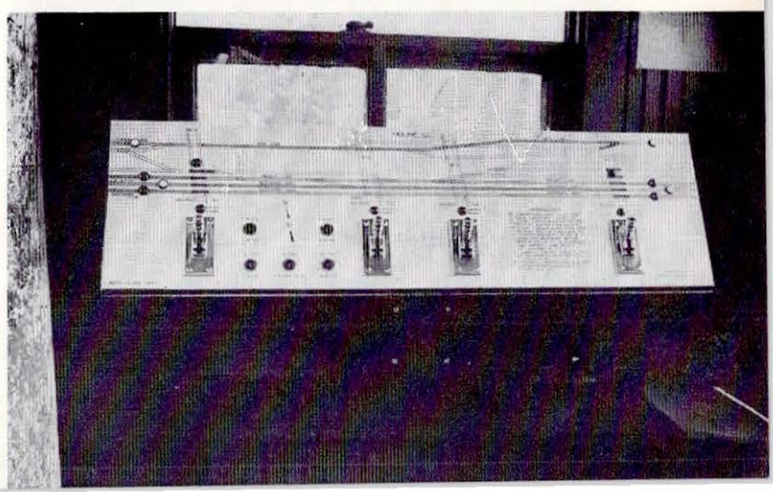


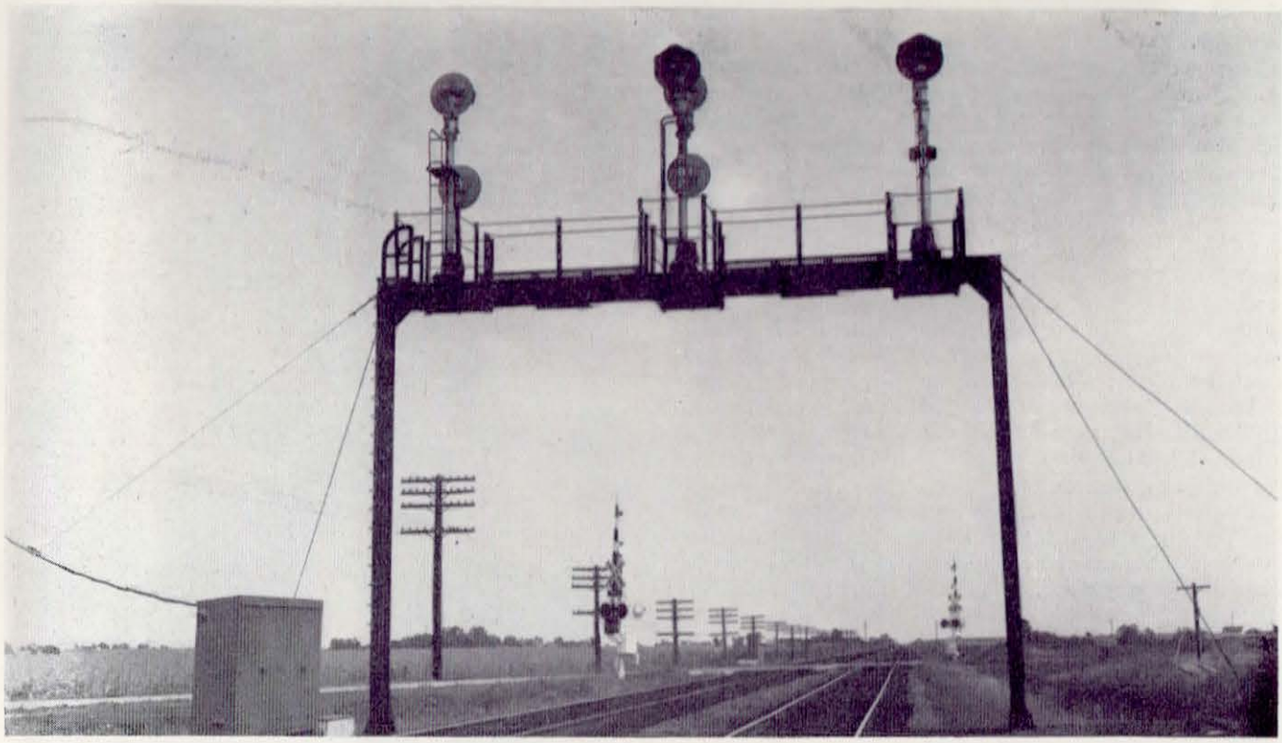
Automatic timing circuits are employed on many automatic highway crossing installations in high speed territory to give ample protection for fast trains without tying up the crossing unduly for slow trains.



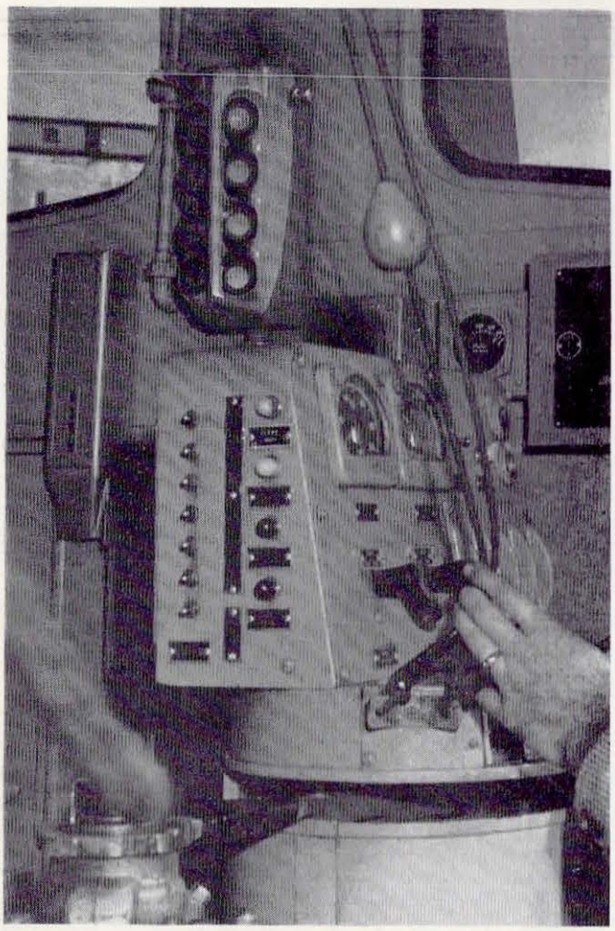
An electrically locked hand-throw switch of the type used on most CRI&P installations.

The control board for manually controlled protection covering four grade crossings in Moline, Ill., is one of the "tailor-made" installations recently completed.





The CRI&P was one of the pioneering roads in the application of C.T.C. two-way running operations over double track. A signal bridge at Mokena, Ill., just west of Blue Island.



Continuous cab signals are in use on the heavily trafficked line between Blue Island and Rock Island, Ill. A view of the installation in the cab of a suburban locomotive.

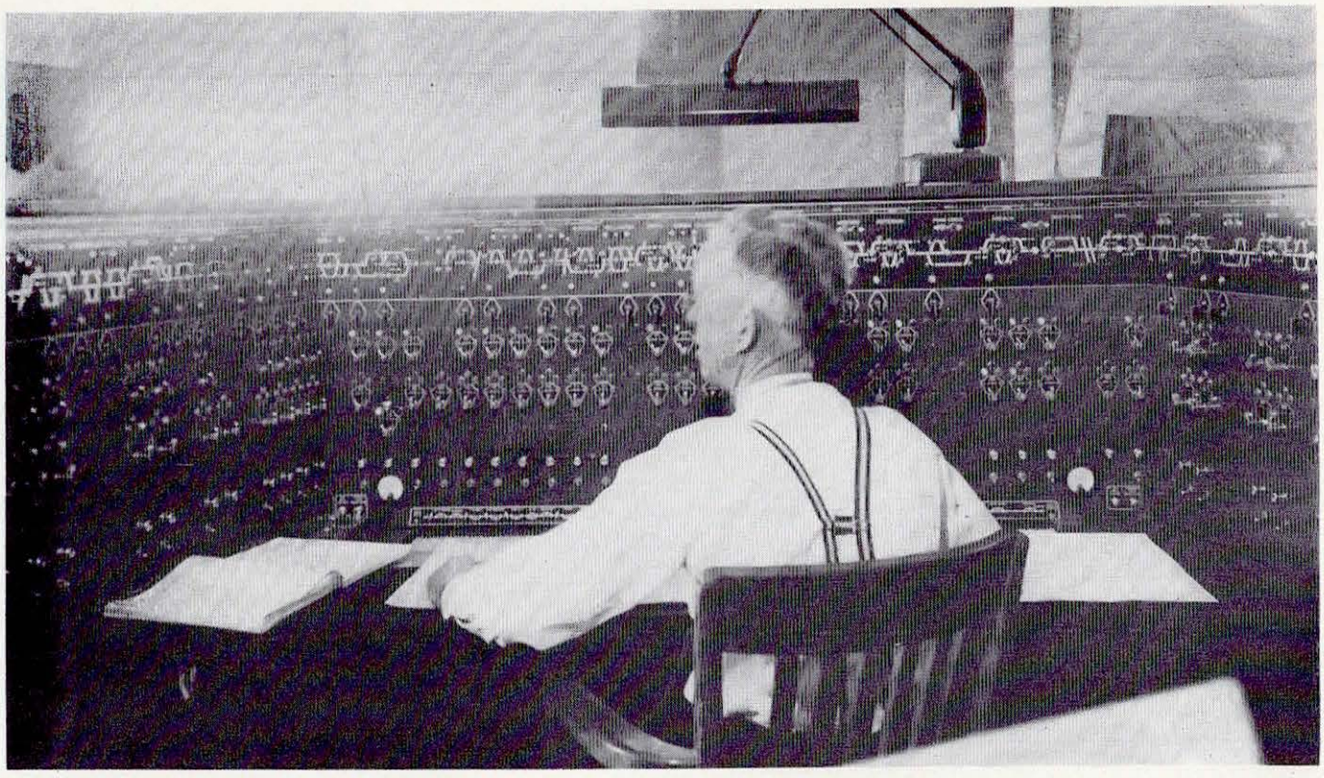
dispatcher at Caldwell, Okla., approximately in the middle of the territory. Track circuits between sidings are of the coded type and are normally deenergized, making it practicable to operate intermediate signals and track circuits from primary batteries, thereby avoiding the expense of line wires between sidings, and of an a.c. power distribution circuit.

Electronic "OS" Reports

Another interesting arrangement devised by the signal department for the improvement of service is an electronic "OS" reporting system placed in service in 1946 on the secondary line between McFarland, Kan., and Belleville.

The dispatcher at McFarland now regularly receives sound code signals which indicate the arrival and departure of trains at unattended sidings and stations on the 104-mile line. Inasmuch as there are long distances between staffed reporting offices on this line, the lack of information as to the whereabouts of trains on the intervening stretches had slowed the movement of traffic. However, with the use of this system the dispatcher, possessed of better knowledge as to the trains' actual whereabouts, is able to set up meets with less waiting time.

A continuous inductive automatic cab signaling system is in service on the busy stretch of the line between Blue Island, Ill., and Rock Island. To date 130 locomotives which regularly operate over this line have been equipped with cab signals for forward operation only, and 17 have been equipped for operation in either direction, thus eliminating the necessity for turning these engines when used in suburban or other local services within the territory.



The C.T.C. control panel at Caldwell, Kan., which controls 231 miles of line between Herington and El Reno, Okla., is the heart of a facility handling up to 25 trains daily.

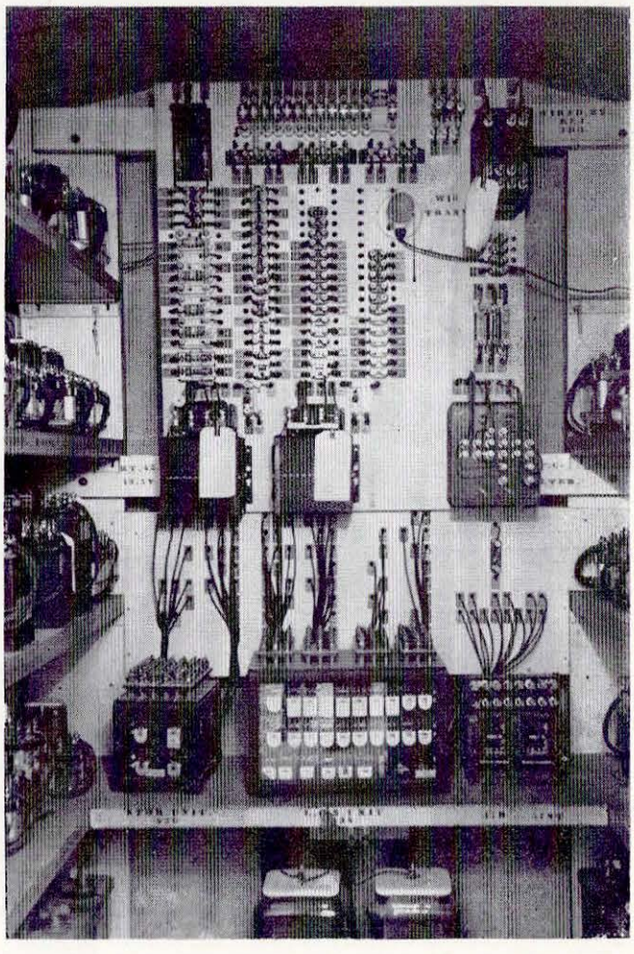
Interlocking plants protect 46 crossings on the system. They include 25 electric plants, 1 electromechanical plant, 17 mechanical and 1 remotely controlled electric plant, and 2 automatic plants. The automatic plants are both in C.T.C. territory and are equipped so that the dispatcher, by means of a lever on his control machine, may give preference to one or the other of the roads, as conditions may require. A new electric interlocking plant is now being installed at the Gresham (Chicago) crossing of the Baltimore & Ohio, replacing an out-dated mechanical plant.

Crossing Protection

With so many crossings on the system which must be policed, the problem of providing adequate protection has been approached on a long-range basis with an average of 20 new crossings a year receiving new, modern protective installations. About 90 per cent of the new installations are automatic. To date, 481 crossings are protected with flashing lights, and 227 are protected with flashing lights and gates.

Automatic installations, with superimposed manual supervision, were used in several instances involving complicated local conditions. This arrangement provides for straight automatic operation except when an operator takes over because of some particular local condition—such as a switching move, fouling the circuits but not the crossing—thus eliminating the hazard of operator failure or inattention.

On many of the Rock Island's high-speed lines, special circuits are employed to time the operation of automatic protection devices to the speed of the train. With this arrangement it is possible to provide ample protection for high-speed passenger trains without tying up crossings for long periods in advance of slow trains.



A typical C.T.C. instrument house on the installation between Herington and El Reno.

Reputed to be the "largest refrigerated warehouse in the world" the Alford Warehouse in Dallas is served exclusively by the Rock Island. The second largest in town—the Empire Warehouse—is likewise a CRI&P exclusive.

Building Traffic by

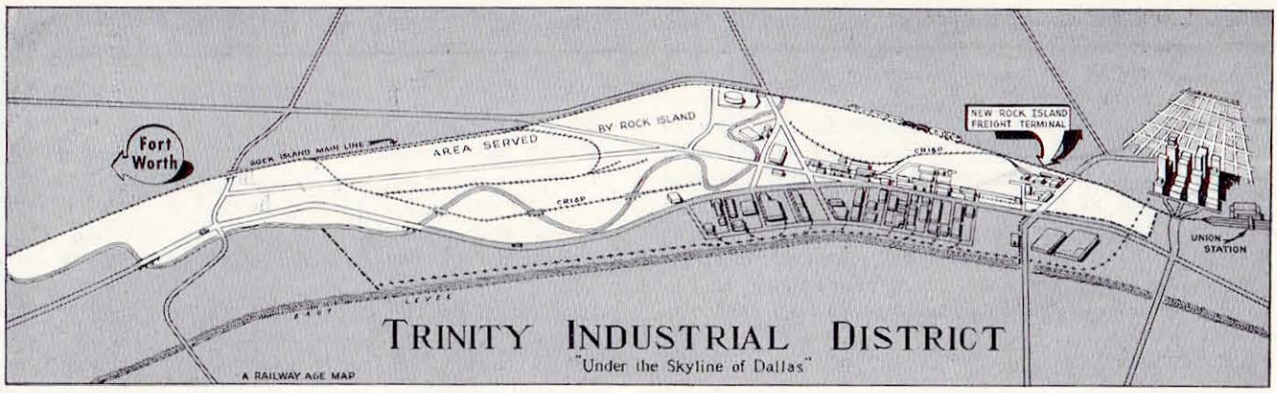
Seeking New Industries

Industrial development is a tool being used effectively by the Rock Island in its program of "Planned Progress"

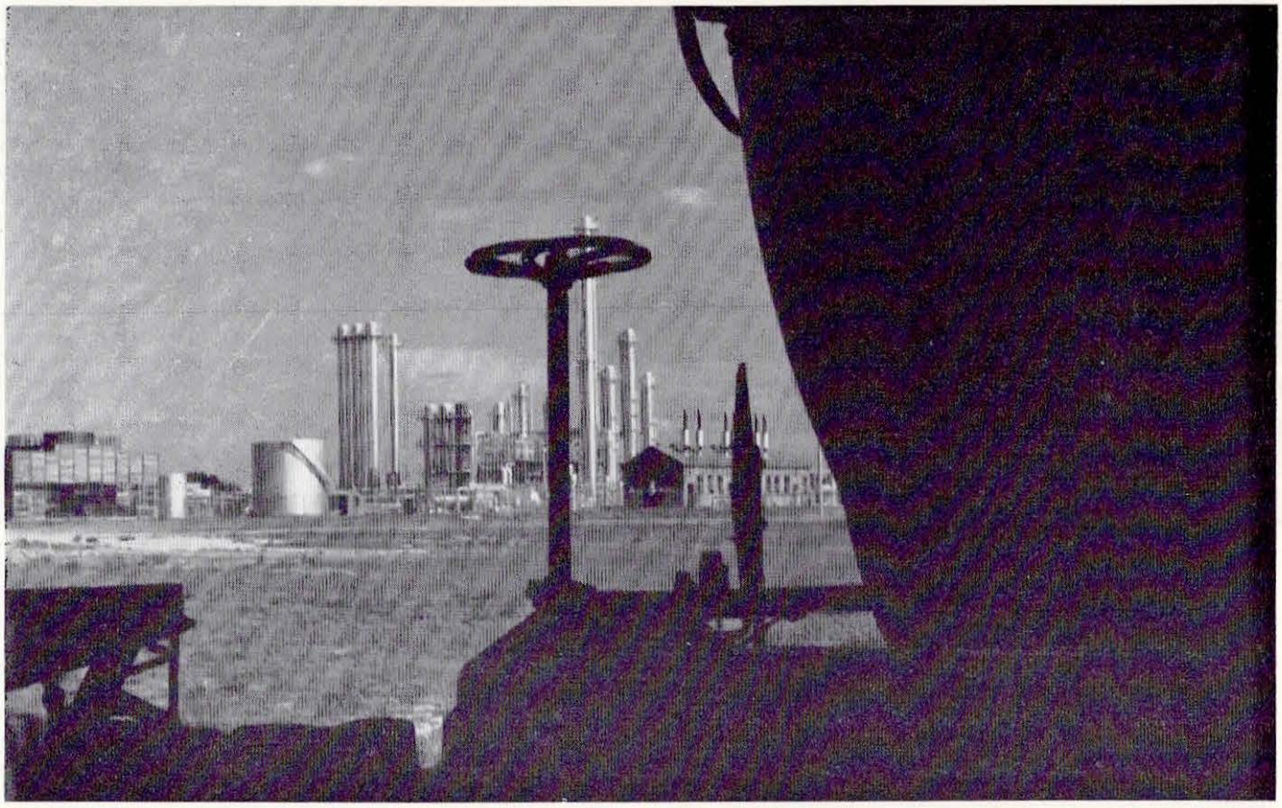
The memory of the dust-bowl days of 1930-35 has a very dry taste to Rock Islanders, for its attendant successive crop failures together with the general economic collapse of 1929-30, caused acute financial trouble for the road.

Desirous of being less dependant on agriculture, Mr. Farrington and his staff have taken full advantage of the westward trend of population and of industry to build a wider, more substantial revenue base by means of traffic diversification through industrial development. As a measure of the success being achieved by this program, in the decade 1941-1950 more than 2,500 new industries were established on the Rock Island, representing a total investment of over $550 million in private capital and having a potential annual revenue to the Rock Island of over $60 million. Last year 277 new industries were located on line, and 29 on-line plants enlarged their capacity, representing an investment of about $168 million with potential annual revenues for the Rock Island of about $3 million.

These figures look mighty good to a road which in its earlier history was so largely dependent on the products of agriculture for its traffic. Inasmuch as agriculture still is big business in Rock Island territory, the addition of industrial traffic only serves to insure long-range stability of revenues.



The Rock Island holds the greatest potential in Dallas' fast growing Trinity Industrial District. A thousand acres of undeveloped land, all served by the CRI&P, lie to the left—beyond the limits of this map.



Growth of the petroleum and affiliated chemical indrstries in Arkansas and Louisiana has given the line from Little Rock south to Alexandria considerable importance. Here is the Southwest refinery at Dubach, Ark.

A visitor traveling over the system today is impressed by the evidences of intense industrial activity on every hand. Yet it was not always so. During the period from 1882 through 1898, little or no thought was given to the need for developing industries along the lines of the railroad. Apparently management then had but one idea—to concentrate entirely on increasing bridge traffic from and to connecting lines.

In 1901, the road fell under the control of the so-called Reid-Moore syndicate whose principal and all-consuming interest was expansion. Although this was the period when the system achieved its greatest enlargements through the acquisition of new lines, industrial development was a secondary consideration. Bankruptcy brought an end to these dreams of empire in 1915. Industrial development finally got under way in earnest in 1916, only to be interrupted by World War I and ensuing governmental operation of the railroads. So it was not until 1923, with the formation of a department for the express purpose of fostering industrial development, that any long-range program could be mapped out and carried into action. The construction of the Amarillo-Liberal and Dalhart-Morse lines was planned during this period—lines which, in recent years, have enabled the Rock Island to secure a wealth of petroleum, ammonia and carbon black traffic from the Texas Panhandle.

Industrial development has continued uninterruptedly to this day, though it, along with everything else on the

railroad, suffered during the depression days of the early 1930's. Since 1936, the program has been continuously and aggressively aimed at increasing the number of industries along Rock Island tracks.

In recent years—since its emergence from trusteeship—the Rock Island's ability to develop new industrial locations by the purchase and sale of land has improved markedly, and, as a result, its developmental efforts have achieved greater flexibility. The board of directors, management and staff fully appreciate the value of securing new industries, and are working harmoniously and in close cooperation toward that end.

New Growth

In the five year period 1946-50, as the result of the activities of the industrial development department, forests of new concrete storage grain elevators have sprung up along the Rock Island, particularly in the heavy wheat growing territory of Kansas, Oklahoma, and the Texas Panhandle.

Other evidence of the department's activity can be seen everywhere on the system. On the Arkansas division, in the general vicinity of Little Rock and Hot Springs, geological surveys have disclosed rich deposits of various ores. These are beginning to be developed, and are productive of substantial revenues on lines which for years were thought of as "dogs," and as recently as 1935 were being considered for sale or abandonment.

This area contains the largest bauxite (aluminum ore) deposits in the United States. They have attracted one of the largest aluminum reduction plants in the country (at Jones Mill, Ark.). The past few years has seen a large-scale development of barium mining and ore reduction in the area. And within recent months a large Arkansas granite quarry has been placed in operation near Little Rock which produces a high grade crushed stone. Shipments from this quarry average 50 cars a day. The presence of these industries on the Rock Island is the result of continuing efforts by the traffic, operating and engineering departments working as a team with the industrial development department.

Estherville, Iowa, is considered an attractive, modern small town, characterized by pleasant homes, paved streets, good schools, and a healthy community pride. It is cited as an example of what industry can do for a small agricultural town. A meat packing plant was brought to the town by the railroad's industrial development department about 12 years ago, and has twice expanded. It, and a horsemeat pet-food packing plant also brought in by the Rock Island, are what have given the town the financial support to build itself to its present stature. This principle—which the road proposes to continue following—is sure to promote the welfare of other smaller cities and towns served by its rails.

In addition to its generalized efforts to locate industries, the industrial development department is participating in a number of specific developmental projects at a wide range of points. For example, 150 acres of land were acquired just north of Des Moines two years ago for industrial development. Construction of the new Sandown cut-off in Denver permitted the acquisition of land for industrial development there—something the Rock Island had never had before. It now holds 300 acres, known as the Sandown and the Fair Lawn industrial districts, where five new industries have located. In Colorado Springs, the railroad purchased 70 acres of land in 1948 for industrial development. Now known as the Roswell Industrial District, 25 acres have been sold and are occupied by 14 industries. The railroad is also cooperating with local interests in the development of 130 acres of adjoining land.

In North Little Rock the railroad owned 40 acres of land, and it purchased 80 additional acres in Little Rock proper for development as industrial sites. This land is rapidly being taken up by traffic-producing industries.

In Minneapolis, a "packing house belt" line was built several years ago which has given the railroad its first opportunity to develop industrial trackage in that city. Fifty acres of land formerly used for railroad terminal facilities in West Memphis, Ark., have been turned into industrial sites, and five industries have located there.

On January 1, 1950, the Rock Island purchased the Pullman Railroad, a 13-mile industrial line operating in the Lake Calumet district of Chicago. At the same time, land suitable for industrial development was purchased—some adjacent to Lake Calumet, which is being developed by the Federal government and the city of Chicago as a deep-water port. The Calumet Terminal Company has a facility on Lake Calumet and on the Rock Island which serves both steamers and river barges. Another tract has been made available to the Calumet Industrial District, Inc., for the proposed development of a mammoth warehousing project. This area is especially well suited for industrial development because it is within the city limits of Chicago, enjoys round-the-clock switching service, is adjacent to deep-water harbor facilities, and is conveniently located.

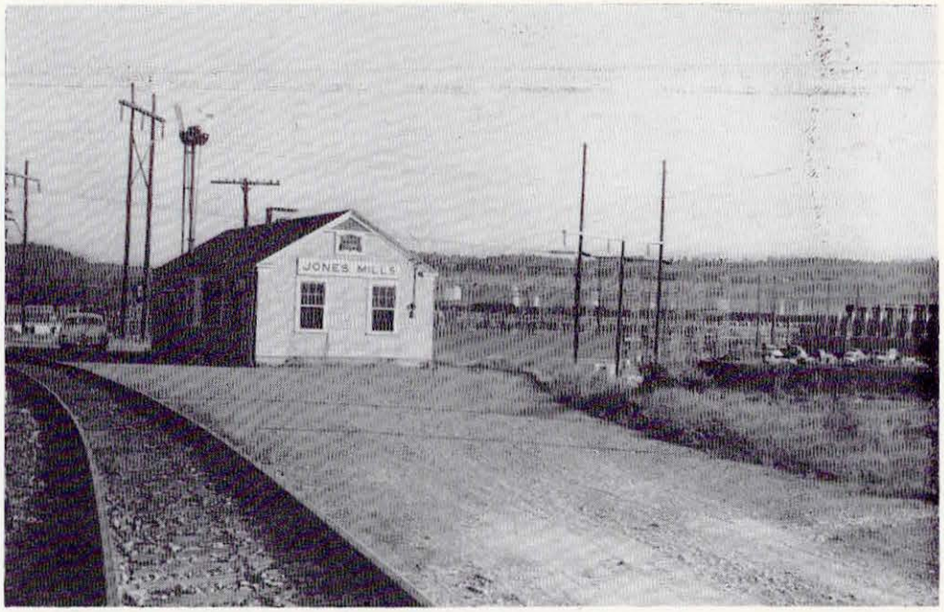
Growth in Texas

Prior to 1947 the Rock Island in Dallas was little more than "a track through town,"—it had no terminal facilities and no industries, and local business was handled through facilities leased from the Cotton Belt. However, the Rock Island has launched out on its own and is now industriously building itself "into" Dallas. A new freight station and terminal facilities have been built, and two large warehouses—including the Alford Warehouse, reputed to be the "largest refrigerated warehouse in the world," and the Empire Warehouse—are located on its line. The Alford Warehouse consists of two 1,550-ft. buildings with spots for 120 freight cars, 30 to a track.

The thousand-acre Trinity Industrial District being developed by the Stemmons Brothers through their Industrial Properties Corporation "under the skyline of Dallas," lies immediately adjacent to the main line from Fort Worth. Although the earliest industries locating in this district were in the portion served by competing railroads, the Rock Island is in the best position for the long pull because it has exclusive access to by far the greatest acreage. The Rock Island's portion of the development is growing rapidly, and holds promise of tremendous expansion in the years to come.

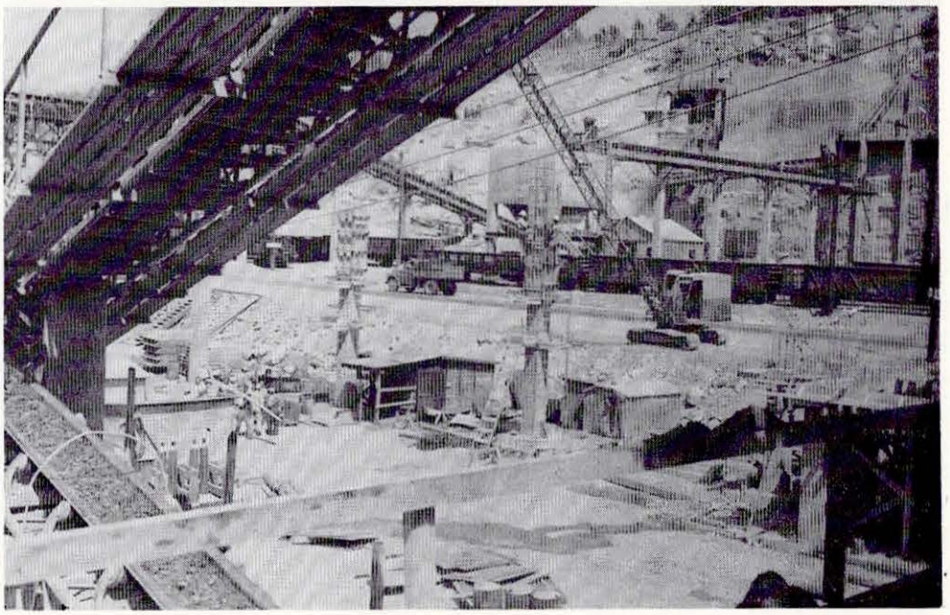
There has likewise been active development in Fort Worth—long an important inbound traffic point. Land has been purchased for two industrial districts which are attracting new traffic-producing industries. One is the Riverside Industrial District which originally measured 60 acres, but with 6 industries now located only 35 acres remain vacant. The other is a 488-acre site 6½ miles northwest of the business section, and adjacent to the main line, which is just being opened for development.

The Rock Island is favorably situated in the territory between Dallas and Fort Worth—earmarked by local people as the area where the greatest industrial growth will occur in the next 10 years. This route follows the north highway past the new Fort Worth municipal air-

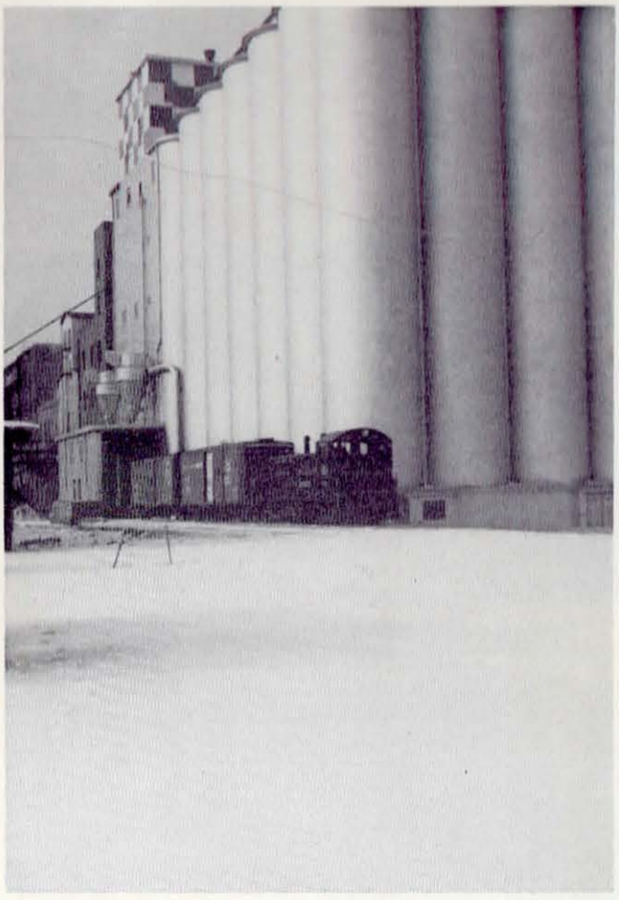


"The second largest station on the Rock Island"—Jones Mills, Ark., site of one of the largest aluminum reduction plants in the United States.

The black cloud marks a carbon black plant in the vicinity of Stinnett, Tex.—a relatively new industry which is helping build Rock Island traffic.



A large new crushed rock quarry just south of Little Rock as it appeared last spring. Shipments from this quarry and crushing plant average better than 50 cars a day.



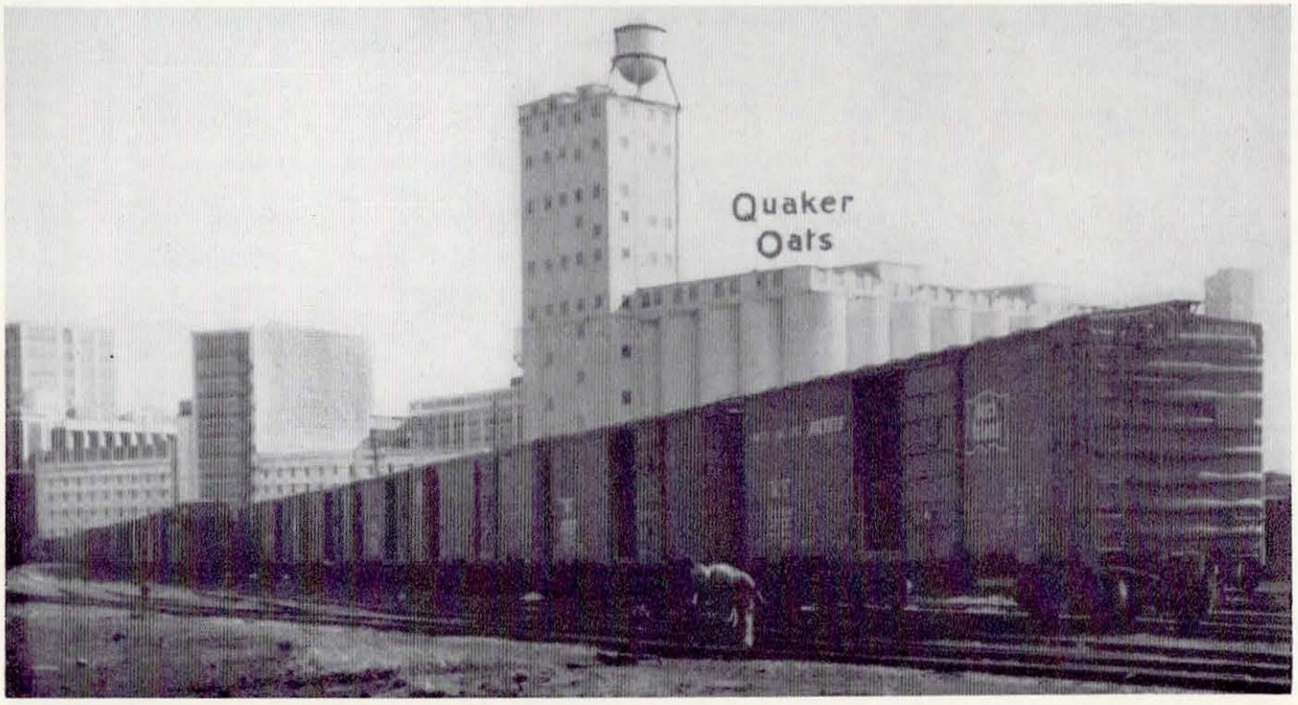
Good service is as essential as good location in locating new industries. The afternoon switcher at work in Davenport, Iowa, keeps cars moving.

port, and passes many desirable potential industrial locations. The $2 million Fry Roofing Company plant, and three other smaller industries at Irving (6 miles west of Dallas), and the Bell Aircraft helicopter plant at Riverside (7 miles east of Fort Worth) are considered harbingers of what is to come.

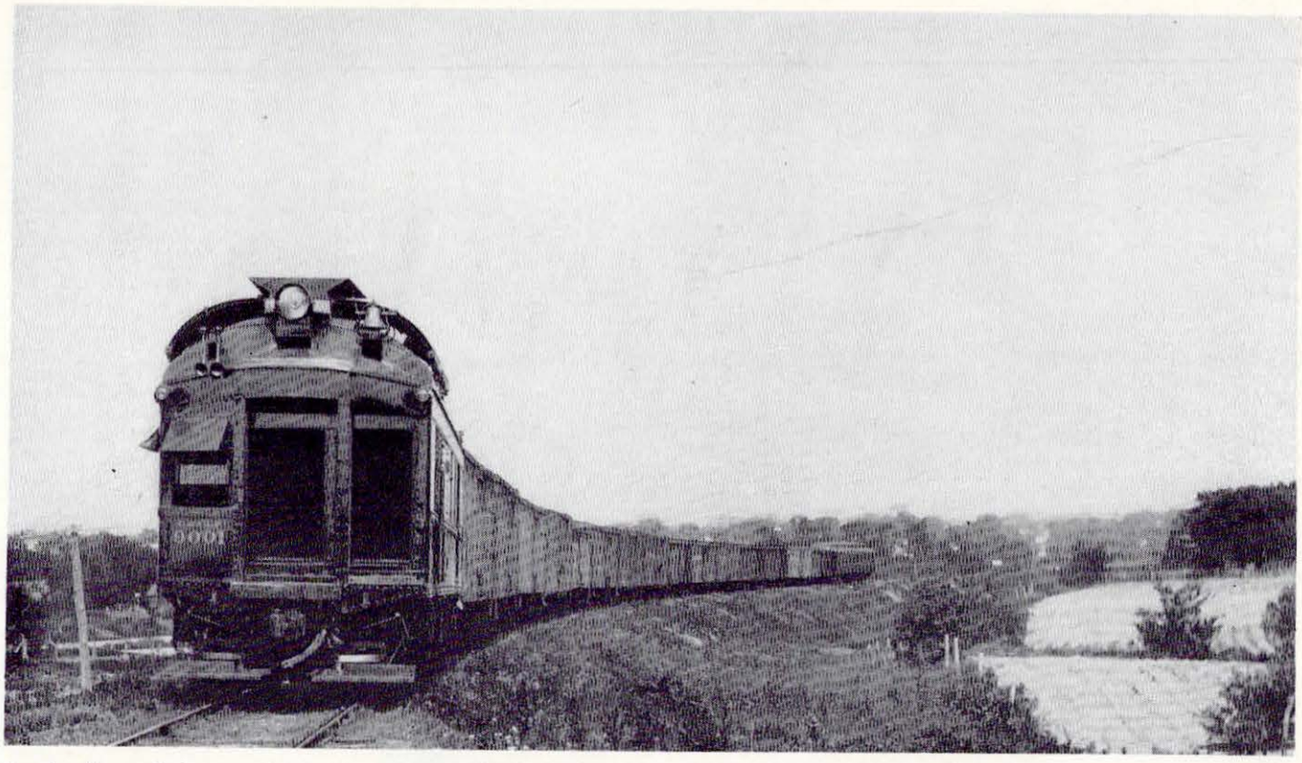
In Houston, the Rock Island has recently succeeded in obtaining a contractual interest in the Houston Belt & Terminal—which performs all of its yard and terminal work in Houston—and has acquired acreage for industrial development. By becoming a "partner" in the HB&T, the Rock Island now has physical access to all industries located thereon.

In Oklahoma City the Rock Island has always held a somewhat favorable position so far as the location of industries is concerned. But in recent years utilization of the close-in area has pretty nearly reached the saturation point. It now appears that the best possibilities for future industrial expansion lie to the west—along the CRI&P's main line to El Reno. In 1946, to further fortify its position in the city, the Rock Island joined hands with the Santa Fe in acquiring the properties of Oklahoma City Terminal Railway, a defunct interurban line which possessed some key industrial trackage within the city. This terminal line has figured prominently in a large-scale civic plan sponsored by the Chamber of Commerce, which calls for extensive line relocations—now about completed. The relocated line will serve a new 40-acre Willow Springs Industrial District being developed and promoted by the Chamber of Commerce.

The projects discussed are but highlights from the Rock Island's record of recent achievements. A complete listing would have to include discussion of developments in St. Joseph, Kansas City, Memphis, Amarillo, Omaha, Council Bluffs, Cedar Rapids, the Quad Cities (Rock Island, Davenport, Moline and East Moline), Peoria and numerous other smaller points.



Hard-hit by the depression of the early 1930's, the Rock Island is neglecting no opportunity in developing new sources of traffic.



In the days of the gas-electrics, the Rock Island was the largest user of these units for branch-line freight and mixed service. This is a 550-hp. Electro-Motive unit, converted in 1927 from a 40-ft. all-steel express car using two E.-M. Model 120 power plants. This unit is now at the Silvis shops awaiting conversion to diesel.

Getting More Out of Diesels

Careful assignments, high utilization used to get maximum performance at minimum cost

The careful and efficient use of its diesel-electric power has been an important factor in building the Rock Island's record for operating efficiency. As a far-flung system with a high percentage of secondary and branch lines, and with no uniform volume movements, the Rock Island has had to develop skill in obtaining maximum utilization of motive power. This has had the two-fold effect of reducing the number of locomotive units which had to be purchased—particularly with so many other places where available capital could be invested to effect sorely needed improvements and economies—and reducing the per-mile cost of those in service by increasing their utilization.

The Rock Island is one of the roads which pioneered in the adaptation and application of the internal combustion engine to standard railroad service. Although it was not the first railroad to own a diesel, it was one of the first railroads to use them extensively. In the days of gas-electric passenger cars the Rock Island used them extensively for branch-line freight service, as well as passenger service, and it did so on an extensive scale. Most of these units were built by Electro-Motive.

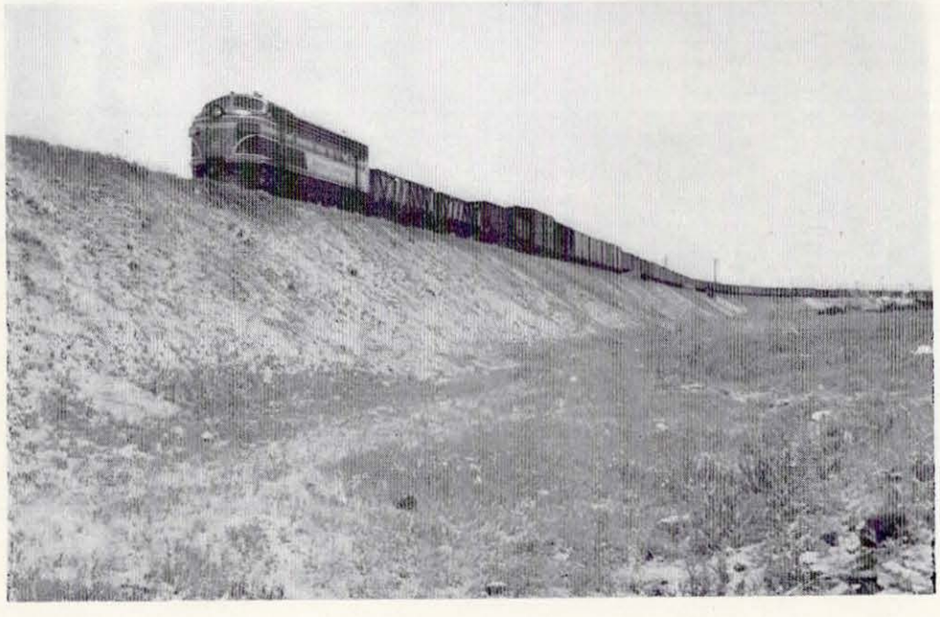
In 1937 what was then an unusually large order for diesel-electric locomotives was given by the Rock Island to Electro-Motive. Ten units were ordered, followed by another order for ten more later the same year. The guiding principle in placing this order was to replace as many old, expensive-to-maintain and operate steam engines (of which the railroad had too many) with a smaller number of efficient, modern units. As a result of intensive use, the original units returned their investment in operating savings in a little over two years, making funds available for additional purchases. With a diesel fleet which now numbers 461 units—including 89 passenger, 114 road freight, 147 road-switchers and switching locomotives—the old philosophy of high utilization still prevails, but is backed by experience gained in over 14 years of actual use. Thirty road-switchers and eleven switchers will be delivered in the next three months, making a total of 502 diesel units.

A High-Utilization Program

The Arkansas division—which comprises lines radiating out of Little Rock to Memphis, Hot Springs, Camden, Alexandria and westward toward El Reno—was one of the first to be completely dieselized. It has what is today one of the more unusual diesel utilization programs on the entire railroad. So high is their utilization, Mr. Jenks often comments, that there is little time left

Locomotive No. 410, an Electro-Motive 1,500-hp. passenger unit with a 61:16 gear ratio and maximum speed of 70 m.p.h., arrives in Amarillo at 7:30 a.m. on the "Choctaw," a through passenger train from Memphis. Immediately upon its arrival, the locomotive is uncoupled and moved to the diesel servicing tracks, about ½-mile distant.

In the yards, No. 410 is fueled and checked, and is now on the lead track ready to take a freight train from Amarillo to Tucumcari. Alco-G.E. unit 1308, just to its rear, is awaiting the morning local train from Amarillo to Liberal, having just arrived on a through train from El Reno.



10:12 a.m., on its way out of Amarillo with a 76-car, 1,800-ton freight train for Tucumcari. Before its return from Tucumcari in time to take the "Choctaw" back to Memphis at 8:30 p.m., No. 410 will make a 186-mile round trip in freight service between Tucumcari and Dalhart.

The Rock Island was the first road to place a large order for diesel-electric locomotives when it ordered ten switchers early in 1937, followed by another order for ten more later in the same year.

in their daily schedule for fueling and servicing. The operation of this pool—which includes 20 units—is predicated on the use of road-switcher units which can be used in multiples for the handling of tonnage trains and singly for branch-line or local trains, or in yard or terminal service, as the occasion demands.

Road freight engines, generally, are operated in two pools, with 87 units maintained at Silvis and 27 units at El Reno.

The Rock Island was one of the pioneers in developing pool operation as a method of obtaining maximum utilization from each unit of motive power. Today its individual runs, as on other roads that have similar high-utilization pools, are frequently so complicated that their complete understanding requires an intimate and detailed knowledge of the entire railroad. On some runs locomotives from Chicago and Silvis go to Kansas City and Tucumcari, and on other runs to Omaha and Denver and back to Des Moines, then up to the Twin Cities, and back to Chicago by way of Kansas City or Cedar Rapids.

Selected Power

Use is made of 18 44-ton, 360-hp. diesel locomotives for yard operations at smaller terminals, and for many assignments in larger terminals. These locomotives have been found mechanically reliable, and well suited to many tasks too small to justify assignment of larger units.

Another interesting case of diesel utilization on the Rock Island is between Amarillo and Tucumcari, where a single-unit 1,500-hp. road passenger engine, which would otherwise tie up in Amarillo from 8 a.m. until 9 p.m., is used to handle a regular freight train between Amarillo and Tucumcari, 113 miles. The units used for this service were originally built for suburban service in Chicago, and have a 61:16 gear ratio, and a maximum speed of 70 m.p.h. This practice has been followed for nearly eighteen months with no difficulty.

Another example exists on the main line at Tucumcari where the double-unit passenger E.M.D. "E-7" and "E-8" locomotives used for the "Imperial" make a round trip to Dalhart with a freight train during their lay-over from 8 p.m. to 7 a.m. the following morning at Tucumcari. It has been found that this locomotive (which is geared for better than 90 m.p.h.) can handle a 3,000-ton train over this 93-mile stretch (which has a maximum grade of 1.0 per cent) on better than a four-hour schedule, thereby turning in 186 miles of revenue freight service during a period when it would otherwise be idle.

Maintenance records of the locomotives used in this and the Amarillo service show no unusual maintenance or wear—other than what might be expected as a result of the added mileage—because of their extra assignment.

In the Chicago area, a portion of the suburban service has been dieselized with engines assigned to the Chicago pool.

These units are also used for freight service between Chicago and Silvis on week-ends, for switching in the Chicago terminal, and for occasional main-line passenger runs. This practice has reduced the number of diesels which it has been necessary to purchase to achieve dieselization of the Chicago and Rock Island divisions. Fifteen Alco-G.E. 1,500-hp. dual-purpose road-switchers, and two Fairbanks-Morse all-purpose road-switchers are used in suburban service and are available at all times for such extra assignments as may come along.

A by-product of the Rock Island's high utilization program is strong pressure on the maintenance forces to reduce diesel failures on the road. Such failures, because of the intricate utilization schedule of each locomotive, can have far-reaching effects. The only alternative to high standards of maintenance and servicing is the ownership of extra locomotives which can be held for stand-by service. Consequently the Rock Island has devoted its attention first to getting better performance from its existing power.

Centennial celebrations were touched off in Chicago on September 9 with the operation of this old engine and "Palace" dining car as a part of a celebration organized by community groups on the south side of Chicago.

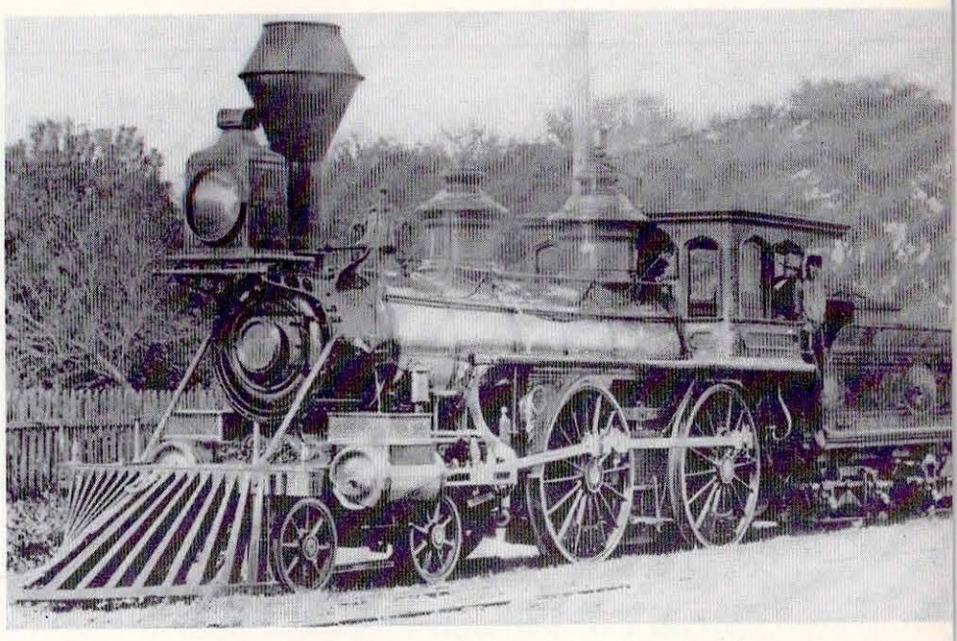
1852—HIGHLIGHTS IN ROCK ISLAND HISTORY—1952

Illustrations from the Walter A. Lucas Collection

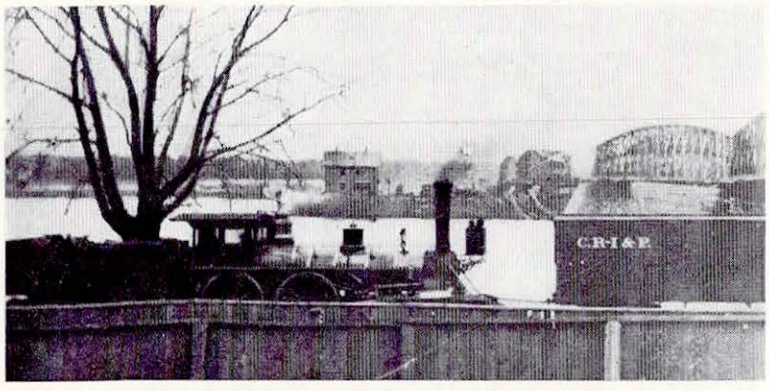
The idea of the railroad which became the germ-cell of the Rock Island system of today was first discussed in June 1845 at a meeting of civic leaders in Rock Island, Ill. These men, conscious of the needs of the settlers moving into Iowa territory and beyond, felt that a railroad should be built from Rock Island to LaSalle, Ill., to link the Mississippi and Illinois rivers.

- **February 27, 1847 . . .**Rock Island & LaSalle Railroad Company incorporated by special act of Illinois legislature.
- **February 21, 1851 . . .**Charter amended by Illinois legislature and name of road changed to Chicago & Rock Island Railroad as a result of surveys indicating the desirability of extending the line to Lake Michigan.
- **October 1, 1851 . . .**First earth turned in Chicago as construction starts.
- **October 10, 1852 . . .**First train from Chicago to Joliet.
- **February 22, 1854 . . .**Rails reach Rock Island, the first railroad to connect Chicago with the Mississippi river.
- **November 7, 1854 . . .**First train operates over the Peoria & Bureau Valley; road acquired by the Rock Island under perpetual lease.
- **September 1, 1854 . . .**Cornerstone laid in Davenport for first bridge across the Mississippi for any form of transportation.
- **May 1, 1856 . . .**The steamboat "Effie Alton" runs afoul of the road's new Mississippi draw-span at Rock Island, with severe damage to both. There follows the historic court action in which Abraham Lincoln defends the railroad's right to bridge the river. The first jury disagrees, and is discharged. The second trial results in a court order to remove the bridge and piers. This is appealed to the Supreme Court, which found for the railroad.

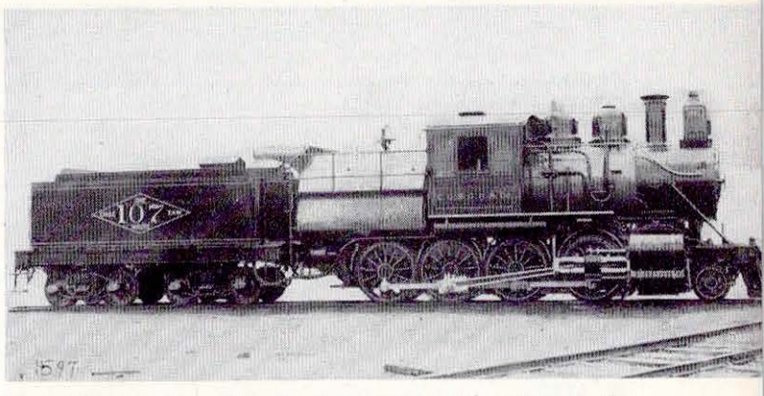
(Continued on page 146)



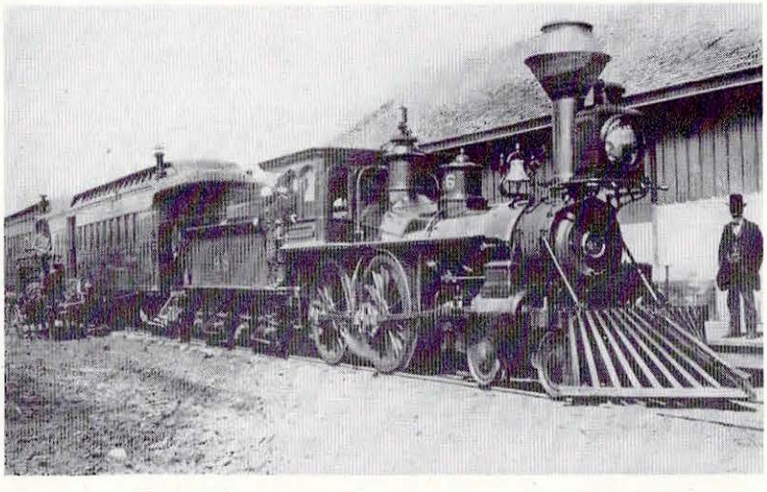
This locomotive, named "America," was built by the Grant Locomotive Works, Paterson, N. J., for the Paris Universal Exposition of 1867. It was called the silver engine because the boiler, smokestack, cylinders, valve chests, dome, sand box and headlight were covered with burnished German silver, and many of the appliances on the engine were silver plated. A winner of the Gold Medal at the exposition, the locomotive was returned to the United States and purchased by the Rock Island in 1869. This view shows the locomotive after it was acquired by the CRI&P and the original German silver stack was replaced with a diamond stack.



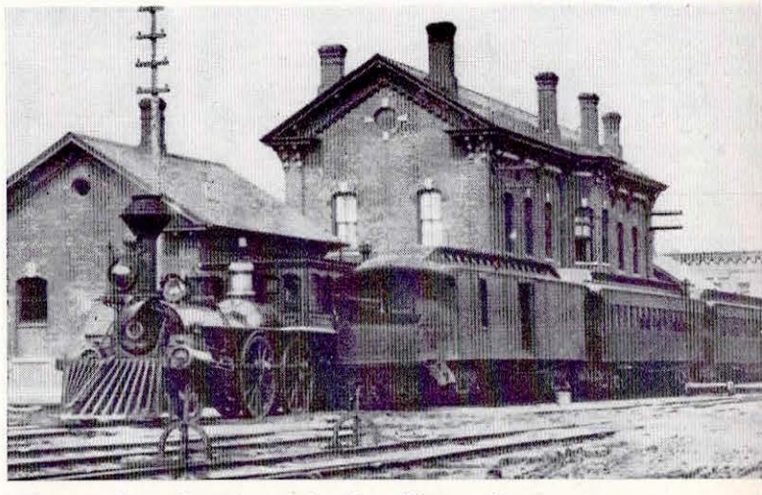
Wreck of the drawbridge across the Mississippi river at Davenport, Iowa, after the great gale of March 17, 1868. This tornado swept across Illinois and also wrecked the shops of the CRI&P at Chicago, unroofing a large portion and demolishing a part of the blacksmith shop causing $40,000 worth of damage.



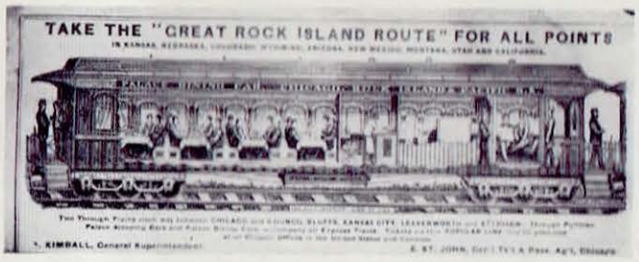
Consolidation type freight locomotive No. 107 of the Choctaw, Oklahoma & Gulf, built by the Baldwin Locomotive Works in 1902. Equipped with the Vauclain, four-cylinder system of compounding and a Wootten boiler, this camelback locomotive was a type rarely found on western roads.



Branch-line engine No. 46 with two-car train at Indianola, Iowa, in 1881 ready to start its morning run to Des Moines. Huge headlights and small boilers were characteristic equipment of these early steamers.



Winterset branch train at the Des Moines, Iowa, station in the 1860's. This 42-mile run was accomplished with one of the oldest engines on the road, No. 3, having inclined cylinders. Each room in the station had a stove.



Sectional view of a Rock Island dining car of the 1870's as it appeared in the Traveler's Official Guide. "A full meal is served from Bill of Fare for 75 cents with two hours to enjoy it," according to the advertisement.

Courtesy A.C.F.

In the days of all-wooden freight equipment the CRI&P had this furniture and vehicle car which was built for it by the American Car & Foundry Co. at Detroit in 1899. Its stenciled capacity was 60,000 lb.

- **July 9, 1866 . . .** The Mississippi & Missouri is purchased by the Chicago & Rock Island, which adopts the new name Chicago, Rock Island & Pacific Railroad.
- **May 11, 1869 . . .** Line reaches Council Bluffs.
- **June 1873 . . .** Jesse James and his "boys" halt a passenger train just west of Adair, Iowa, and rob the mail and express car—reputedly James' first recorded holdup of a train.
- **December 1879 . . .** Entrance made into Kansas City.
- **June 2, 1880 . . .** Many subsidiary and branch lines, previously purchased or built, are consolidated into the main system and the corporate name changed to Chicago, Rock Island & Pacific *Railway*.
- **1885 . . .** Control of Burlington, Cedar Rapids & Northern acquired by purchase of capital stock.
- **December 30, 1885 . . .** Chicago, Kansas & Nebraska—a Rock Island affiliate—formed to extend lines into Kansas, Nebraska, Colorado and Oklahoma.
- **May 19, 1887 . . .** Trackage rights over Union Pacific from Kansas City to Topeka acquired.
- **1888 . . .** CK&N places 1,113 miles of railroad in operation, including Horton to Liberal, Kan. (February 26); Herington to Pond Creek, Okla. (July 15); and Horton, Kan., to Colorado Springs, Colo. (November 5). Line from Bucklin to Dodge City, Kan., purchased from Arkansas, Kansas & Colorado (March 21).
- **1889 . . .** Trackage rights over Union Pacific from Limon to Denver acquired.
- **June 10, 1891 . . .** All lines in Kansas, Nebraska and Colorado, totaling 1,476 miles of new railroad, consolidated into CRI&P.
- **1892 . . .** New line south through Oklahoma Indian territory (roughly following the old Chisholm trail) reaches Texas border.
- **1894 . . .** Line completed from Lincoln, Neb., to Jansen, completing through line from Omaha to Colorado.
- **January 1, 1902 . . .** Control of CRI&P obtained by group of promoters known as "Reid-Moore syndicate," with ambitions of developing nation's first coast-to-coast trunk line. Group also controls Frisco, Lehigh Valley and Lake Erie & Western (now Nickel Plate). Other lines acquired by the syndicate are, for the most part, in need of new equipment and extensive improvements—all of which have to be financed from CRI&P earnings.
- **April 1902 . . .** Control of the St. Louis, Kansas City & Colorado acquired with line from Kansas City to Bland, Mo., 104 miles west of St. Louis. Rock Island completes line into St. Louis in 1903-4.
- **June 1, 1902 . . .** Burlington, Cedar Rapids & Northern leases entire line to CRI&P for 999 years, adding 1,289 miles to the system.
- **October 1902 . . .** Line completed from Liberal, Kan., to Santa Rosa, N. M., making connection with El Paso & South Western. "Golden State Limited" inaugurated between Chicago and Los Angeles.
- **January 26, 1903 . . .** Chicago, Rock Island & Choctaw incorporated to build from Tucumcari east to Texas state line, and on to Amarillo.
- **March 24, 1904 . . .** Choctaw, Oklahoma & Gulf leases all railroad properties to CRI&P. (The CO&G was formed in 1894 to take over lines of Choctaw Coal & Railway Co. from Wister, Okla., to McAlester, and from Oklahoma City to Fort Reno, and closed gap from McAlester to Oklahoma City in 1895. CO&G purchased Little Rock & Memphis between these two points, and extended its line west to Arkansas-Indian Territory boundary between 1898 and 1900, and extended Oklahoma line east to meet the LR&M. Line completed to Texas border (near Amarillo) during 1901 and 1902. Trains reached Amarillo via trackage rights in 1902.)
- **1905 . . .** Rock Island, Arkansas & Louisiana incorporated to consolidate four small roads purchased with lines running south out of Little Rock. More lines purchased and 200 miles of new line built, reaching Eunice, La., February 1, 1908.
- **October 1, 1913 . . .** Line completed from Malvern, Ark., to Camden.
- **1915 . . .** CRI&P goes into receivership as a result of "complicated financial manipulations of the most bizarre sort."
- **1917 . . .** CRI&P emerges from receivership January 1, well able to meet the demands of World War I, only to be taken over by the federal government along with all other railroads on December 28.
- **1929 . . .** New line completed between Amarillo and Liberal, Kan.
- **1930 . . .** Line completed between Dalhart, Tex., and Morse.
- **1931 . . .** First year of great 1931-35 drought.
- **June 7, 1933 . . .** System goes into bankruptcy.
- **December 1, 1935 . . .** Trustees appoint E. M. Durham chief executive officer.
- **July 1, 1936 . . .** J. D. Farrington joins company. By end of 1936 revenues are insufficient to meet bare operating expenses.
- **1937 . . .** Recovery begins. "Peoria Rocket"—herald of the forthcoming "Rocket" fleet—starts service. First large order for diesel switchers by any American railroad placed by Rock Island. There are most dramatic outward signs of program for building the "New Rock Island."
- **October 10, 1952 . . .** CRI&P marks 100th anniversary of the operation of the first train between Chicago and Joliet.

Photo Credits

Page

102 Robert G. La Vake
104 Galveston Chamber of Commerce
111 Frank Meister
113 Donald Duke
117 Robert Olmsted
132 *Middle and bottom* A. V. Stelzer
133 *Top* A. V. Stelzer
134 *Both by* A. V. Stelzer

After a severe "wringer operation" management still buys in and refunds lots more debt at lower interest

A Railway Age portrait

A. O. Gibson, secretary and treasurer.

CUTTING DEBT

—To Save Money and Achieve Security

The Rock Island is today one of the most conservatively capitalized railroads in the country. Its mortgage debt is about $6,500 a mile, which ranks with traditional "blue chip" roads like the Santa Fe, the Norfolk & Western and the Union Pacific. What does this mean to the customers of the road and its employees and officers? Simply this: that interest payments are taking a smaller fraction of the road's income than they do on railroads generally, leaving money for improvements in service and equipment. It means also that if hard times come, the Rock Island is going to be among the last to feel the sheriff's cold breath.

The Struggle for Solvency

The road's debt structure is simple. As of the end of May, some $51.3 million of mortgage bonds were outstanding. These are being retired at the rate of $1 million a year, by sinking fund provision. In general, the Rock Island is buying in the bonds to the extent of about $1 million ahead of sinking fund requirements, and holding them in its treasury until the fund requires cancellation. Even if it doesn't buy in more than the fund stipulates, 54 per cent of the bonds will have been retired by the time they mature in 1980.

The only other debt on the books is a total of some $52.7 million of equipment trust certificates and conditional sales agreements. Currently these total more than mortgage debt.

"Equipments," of course, are not long-term debt, and are being paid off in regular installments, within a maximum debt life of 15 years apiece. Both the mortgage debt and the equipments carry low interest rates —three per cent or less.

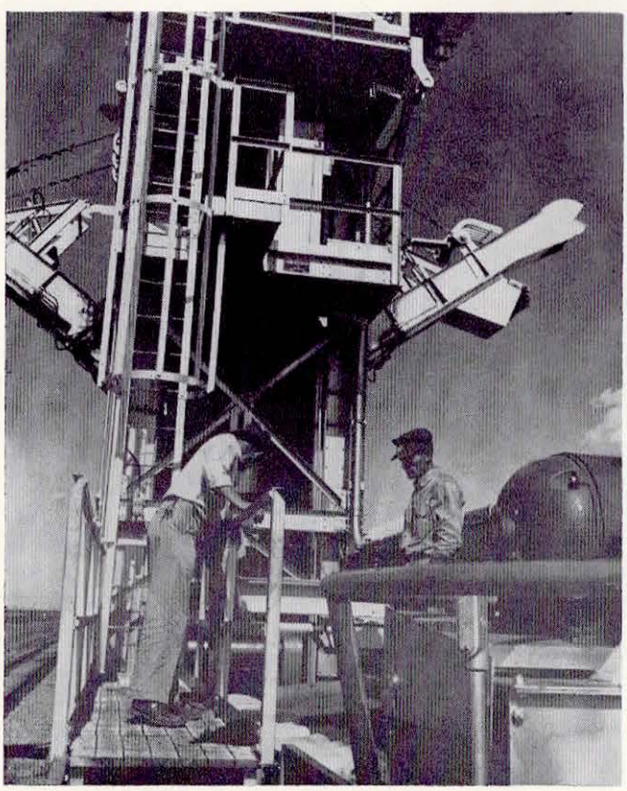
It was not always so. The present outstanding position of the road contrasts strongly with the less conservative policy of some former managements which piled up fixed debt and did not retrench even after the country plunged into the depression of the thirties. To bring simplicity, safety and low interest out of an overstrained financial structure was a difficult job—especially when large sums of money had to be spent on the property in the meantime.

The Interstate Commerce Commission and courts accomplished the first big slice; the Rock Island's management did the rest—by buying in debt from income and by refunding, at lower interest rates, when its credit position reflected the favorable attitude taken by the financial fraternity.

The successive reduction in debt wrought by these means is recorded in Table 1 (page 149). The effect of that reduction, in terms of interest charged against the road's income, is set forth in Tables 2 and 3. It is shocking to recall that in 1933 the interest charged against the road under its existing debt would, if paid in full, have taken 22 per cent of its gross income! The burden was not greatly diminished even with the improved earnings of 1940. In 1951, in contrast, interest took only 1.1 per cent of the Rock Island's revenues—including that for heavy equipment obligations.

Between 1927 and 1932, the road's debt increased by $75 million from an already high base. Although the road was as hard hit by the depression as any, its stockholders apparently took the strange course of pre-

The new rotary reservation board in Chicago, with positions for ten reservation clerks, can handle 2,000 requests daily, and has room for over 3,000 units of space. The road's objectives in installing such equipment are greater efficiency without greater expense.



New icing machine at Dalhart, Tex., is one of the many capital betterments installed as part of the program to reduce cost and improve service.

ferring loss of the principal of their holdings to a reduction in their dividends; the company paid $7 a share in 1930 and $2.25 a share in 1931, at the same time cutting maintenance below the bone and borrowing from the R.F.C. Bankruptcy came in 1933, when the treasury was bare. In 1936 the line hit rock bottom—when its gross was not large enough to meet bare operating expenses. In that year the present operating management took over, for the trustees, and began the long, hard road of physical and financial rehabilitation.

Organization of the new company, effective January 1, 1948, cut the debt by two-thirds. Not only that, most of the new debt comprised so-called "income" bonds, the interest on which is "contingent" upon earnings. Fixed charges of about $13 million were cut to $1.9 million fixed and $3.7 million contingent.

But the management of the new company was not content with even this drastic sloughing off of debt—said to be the most severe of all those roads which went "through the wringer" in the 1930's and 1940's, except the Soo. It began at once to use earnings to buy in, and retire, bonds, as market prices proved favorable. By November 1, 1949, it had, by this means, reduced its mortgage debt still further from $100.8 million (upon emergence from reorganization) to $59.4 million. With credit at a new high, it seemed opportune to refund the remaining debt at a lower rate of interest.

A new $55 million first mortgage bond issue was put out late in 1949, at the attractive interest rate of 2⅞ per cent, and used, along with treasury funds, to pay off all earlier outstanding fixed and contingent interest bonds. It was then estimated that, over the 30-year life of the new first mortgage, interest charges on the bonds

TABLE 1—THE ROCK ISLAND'S FINANCIAL STORY—

ONE OF THE MOST DRASTIC DEBT REDUCTIONS IN RAILROAD HISTORY

(In Millions of Dollars)

Prior to Reorganization (Dec. 31, 1947)	
Fixed mortgage debt	$293
Equipments	10
Total	$303
Just After Reorganization	
Fixed mortgage debt	$ 30
Equipments	10
Total fixed	$ 40
Contingent debt	74
Total debt	$114
Before Refunding (Nov. 1, 1949)	
Fixed mortgage debt	$ 26
Equipments	28
Total fixed debt	$ 54
Contingent debt	34
Total debt	$ 88
After Refunding	
Fixed mortgage debt	$ 55
Equipments	28
Total debt	$ 83
As of May 31, 1952	
Fixed mortgage debt	$ 51
Equipments	53
Total debt	$104

TABLE 2—HOW ROCK ISLAND HAS CUT ITS INTEREST BURDEN

Interest on Fixed and Contingent Debt

1951	$2,246,861	
1950	2,101,056	fixed
	378,556	contingent
	$2,479,612	total
1949	$1,498,925	fixed
	1,529,594	contingent
	$3,028,519	total
1948	$1,411,257	fixed
	2,345,589	contingent
	$3,756,846	total
1947	12,618,144	
1940	13,787,995	
1933	14,419,181	
1929	11,790,396	

TABLE 3—PORTION OF REVENUES CHARGED FOR INTEREST

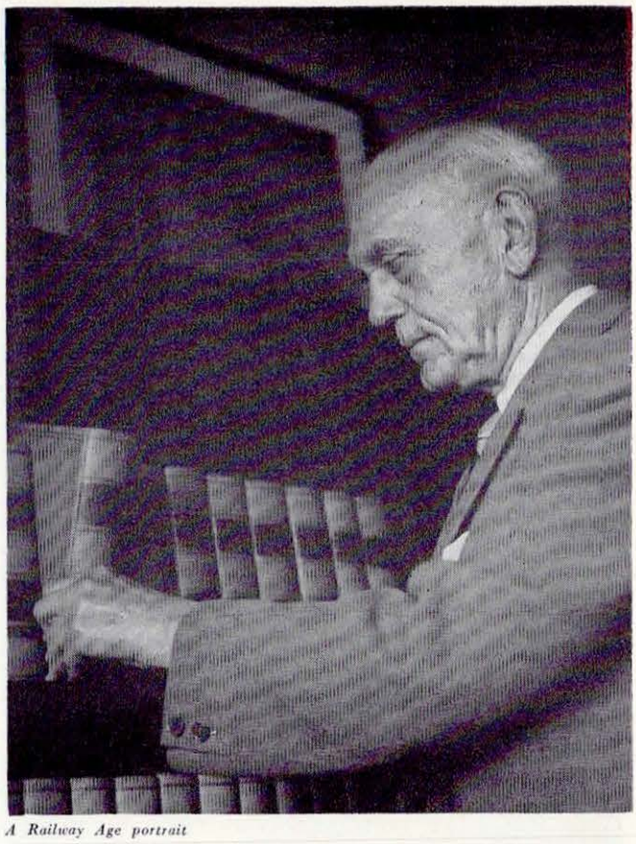
(In per cent of total)

1951	1.1
1950	1.4
1949	1.6
1948	1.8
1947	7.1
1940	17.0
1933	22.0
1929	8.0

TABLE 4—TIMES FIXED CHARGES EARNED

(Before Federal Income Taxes)

1929	2.10
1933	0.24
1940	0 60
1947	2.21
1948	21.39
1949	17.12
1950	12.29
1951	9.65
1952 (7 mo.)	12.20



A Railway Age portrait

W. F. Peter, vice president and general counsel. "It is the responsibility of the law department to advise the management on all legal matters, both by way of avoiding troubles and in handling those which arise in spite of all precaution."

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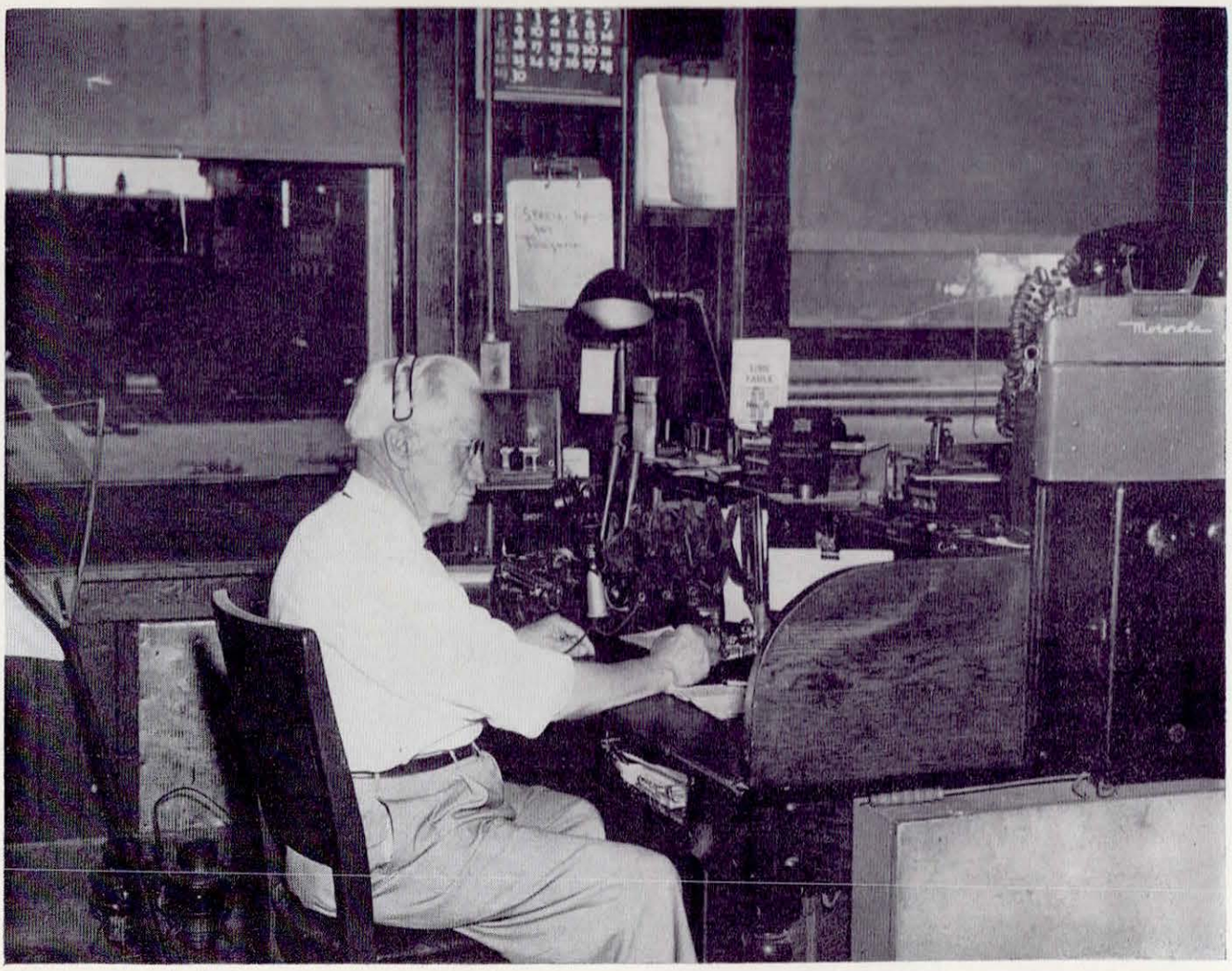
would be about $27 million less than interest payable on the bonds retired. Since that notable refunding operation, the company has consistently bought in the new bonds for sinking fund requirements—and somewhat ahead thereof—and has whittled down fixed mortgage debt to $51.3 million (May 31, 1952).

The $6,500 of debt per mile of road contrasts strongly with the more than $12,000 per mile which management has spent for gross additions and betterments for roadway alone, over the past 15 years.

Stockholders' Earnings

Some $140.8 million of preferred stock was in the hands of the public at the end of last year (par value $100). With an initial dividend of $20 (to cover arrears since 1944, effective date of reorganization plan made retroactively) in January 1948, and $2.50 on June 30 of that year, this stock has continued to receive its regular $5 dividend each year since. No-par common stock (some $70.4 million—at $100 stated value—in hands of the public at the end of 1951) received dividends totaling $3 per share in each of the years 1948-1950; $3.25 in 1951; and at the rate of $4 annually thus far in 1952.

In the years 1948-1952, less than one-third the earnings applicable to the common stock have actually been paid out in dividends; the major portion has gone for improvements to the property and to reduction of debt by sinking fund provision.



Communications are essential to the operation of trains, so the communications department must maintain dispatcher circuits, reaching every tower or open station on the entire system. G. C. Cornett is agent-telegrapher at Shawnee, Okla.

Communications: Nerve System of a Far-Flung Railroad

Constant search for more effective, less expensive equipment and technique has led the Rock Island into many pioneering ventures which have benefited the entire railroad industry

Nowhere is Rock Island pioneering spirit—the willingness to explore new methods and approaches for improving performance and reducing costs—more apparent than in its communications. The communications department can lay claim to several "firsts" in the fast-growing field of electronics.

The Rock Island claims credit for being the first railroad to buy and install its own telephone carrier circuits—an electronic method whereby additional circuits can be superimposed on existing line wires. This installation was made in 1934 between Chicago and Kansas City at a time when the necessary equipment was not easily obtainable. Later, it was one of the first railroads to install end-to-end radio equipment on its freight trains and to use walkie-talkies for caboose radios. More recently, it was the first railroad to try out a permanent microwave installation.

Being a pioneer may bring a certain amount of glory, but it also includes a tremendous amount of hard work, and requires plenty of courage and determination. To-

day, with short wave radio being installed on railroads throughout the country, the Rock Island—which has one of the larger installations itself—can look back to the years before the war when it was experimenting with radio and its possible railroad applications and its many exasperating experiences therewith. Much of the experience gained from that experimentation has been utilized by almost every railroad having short-wave radio equipment.

Back in those pioneering days, the Federal Communications Commission had not assigned specific wave bands for railroad use—as it now has—so the Rock Island could operate, for test purposes on many free channels made available for this purpose by the F.C.C. All bands—including the ultra-high frequencies ranging as high as 2,000 megacycles—were explored in an effort to determine what was best for railroad use under all operating conditions.

Microwave Installation

Microwave equipment is being tested between Goodland, Kan., and Norton, 106 miles, supplementing a pole line which is frequently disrupted by winter winds and sleet storms. This system is expected eventually to permit elimination of 50 miles of pole line in that territory.

Although microwave is extensively used by the telephone companies, Western Union, and a number of pipeline operations for long-distance communication in place of wire lines, there remains a great deal of exploration and experimentation in connection with its adaptation to railroad use and railroad pocketbooks. As with all new developments, it was anticipated there would be some difficulties which would have to be worked out before microwave could take its place with other standard railroad communications facilities. The installation has now been improved to the point where "outages" have been reduced to an average of 30 minutes in a 24-hour day, giving an average of better than 97 per cent performance. These "outages" for the most part are not serious because they most often occur at night during periods of light traffic. However, it is hoped to improve this performance record still further.

The Rock Island installation provides one single-line local telegraph circuit, four duplex telegraph channels, one basic voice channel for telephone train dispatching, and a telephone carrier channel.

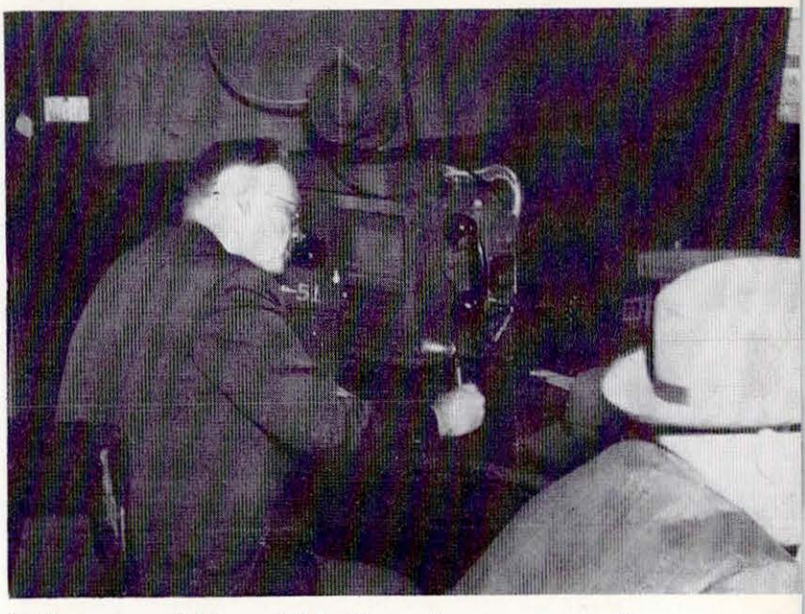
Train Radio Program

The Rock Island has embarked upon a long-range program of completely equipping all main-line freight trains with end-to-end and train-to-wayside radio communications. As indicated on the accompanying map, principal installations thus far have been on the "second district"—generally, the lines south of Kansas City—because the greatest immediate benefits could be realized there. These installations have expedited switching and delivery of cars to patrons and connections, speeded freight train operation, and generally improved service.

In the development of end-to-end train radio, the communications department hit upon the use of walkie-talkie equipment in the caboose using permanent antennas to obtain greater operating range. The use of walkie-talkies enables the conductor to keep in touch with the engine crew at all times—even when he is not in the caboose.

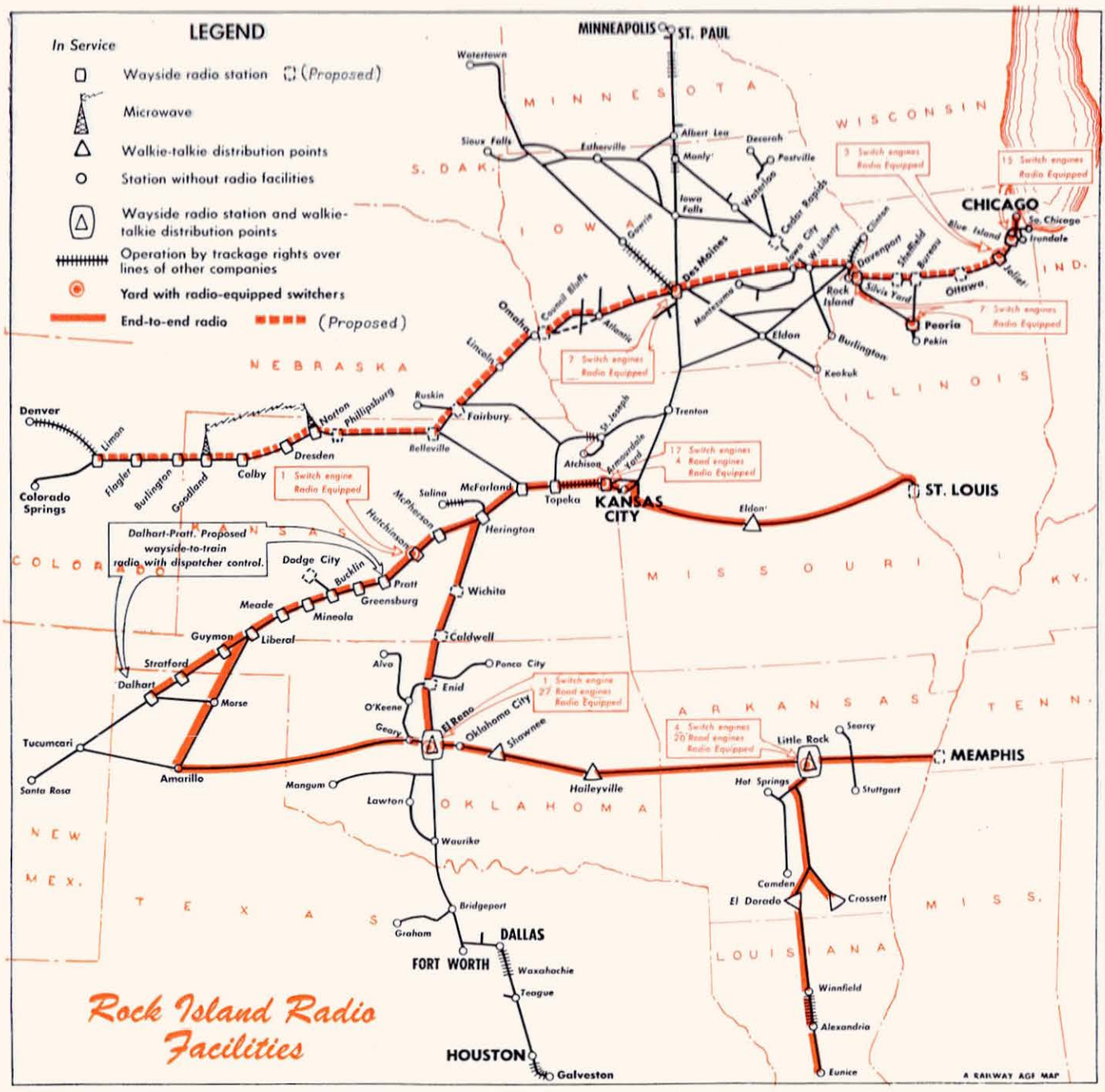
To date, 27 per cent of all the switch engines on the

Radios are used in switcher cabs in several terminal areas to speed the movement and placement of cars. This is the unit in locomotive No. 703 at Peoria.



Radio proves mighty useful in times of emergency—such as last spring's floods along the Missouri river. J. T. Fitzgerald, engineer maintenance of way, is shown here using radio in the Council Bluffs yard office.

Sixty talk-back speakers are used in the Silvis freight yard. The control panel in the yardmaster's office.



system have been radio-equipped, including 25 yard engines working in industrial and terminal areas. Eighty-five per cent of the road freight engines assigned to the second district are radio equipped, and work is now under way on the installation of the first radios on road engines operating in the first district.

Train-to-Wayside Uses

The use of train-to-wayside radio in yard and terminal areas has been found very advantageous, because it enables the yardmaster or the terminal trainmaster to keep in touch with individual crews at all times—and send them on special assignments without waiting for their return to the office. This type of operation works so well that it has been found expedient to equip one switcher and one base station at Hutchinson, Kan. At Peoria and other terminals the company automobiles assigned to the trainmaster in charge of terminal operations have been radio-equipped, permitting their users to direct movements and emergency deliveries of cars.

Over the system there are 25 wayside base stations now in operation, with 15 of them covering the 600 miles of main line from Dalhart, Tex., to Kansas City. These stations provide supplementary point-to-point communications when wire lines fail due to ice storms or other emergencies, as well as communication to and from trains. Plans are now being mapped to tie the base stations at Meade, Mineola, Bucklin, and Greensburg—all in Kansas—into a circuit connected with the dispatcher at Liberal. A "dispatcher control" will enable him, by operating the proper buttons on his control panel, to make contact from any of the base stations with the crew of any train within range.

An interesting utilization will be made of train-to-wayside radio communications upon completion of the wayside station now planned for Dodge City, Kan., at the end of a branch line, 26.5 miles from Bucklin, Kan., a station on the main line which now has a wayside radio installation. The pole line between these points—which is frequently interrupted by wind and sleet storms—will be discontinued, leaving radio as the sole means of communication.

Next year's plans call for extensive installations in the first district. New wayside stations will be installed at Phillipsburg, Belleville and Fairbury—all in the Kansas storm area—which will provide station-to-station communication at times when the pole line is out of service, as well as being important links in the train-to-wayside radio which will eventually be installed between Limon, Colo., and Chicago through Omaha and Des Moines.

Other wayside installations are now being planned for Sheffield, Ill., Bureau and Ottawa. End-to-end radio will be installed next year over the entire line between Denver and Colorado Springs and Chicago.

Classification yard operations have been improved through the use of radio—to the point where there are now 34 radio-equipped yard engines working in the flat yards at Blue Island, Ill.; El Reno, Okla., and Des Moines, Iowa; and the hump-retarder yards at Silvis, Ill., and Kansas City. Additional installations are now being studied for Council Bluffs and Cedar Rapids.

The Rock Island has also experimented with the use of air-motor operated alternators for charging batteries used to operate caboose radios. Two such installations, which are coupled to the train line through restricting orifices, were used continuously for four years without any servicing. At the end of that time, they were removed for servicing and check-up, and were found to be in excellent condition and in need of but minor reconditioning.

Telephone System

For the transaction of company business, the Rock Island has installed and maintains its own telephone system. This system, with over 12,600 miles of line, is entirely railroad-owned and operated.

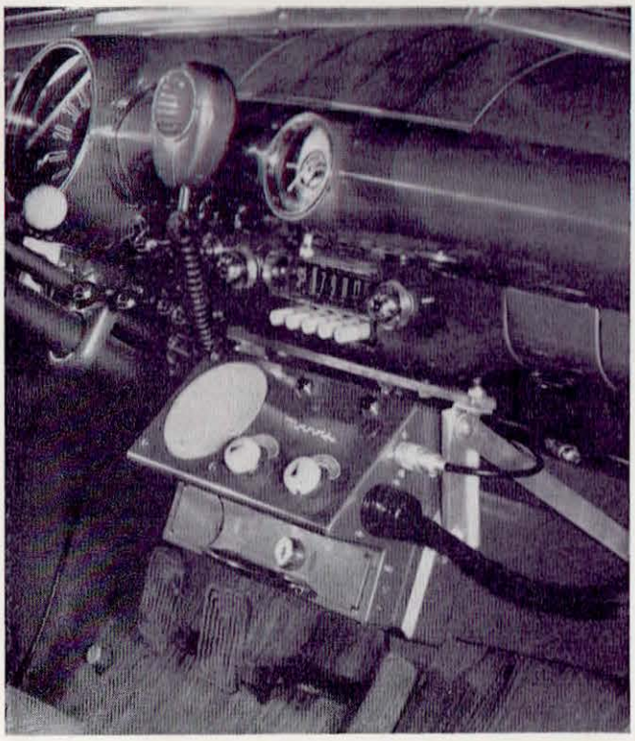
For the faster handling of local calls, automatic telephone exchanges have been installed at the general office building in Chicago, as well as at Englewood (Chicago), Blue Island, Silvis, and Kansas City. The telephone system at Silvis and Blue Island includes a fire alarm and watchman's reporting system.

In 1934, the first railroad-owned and operated carrier telephone installation was made by the Rock Island between Chicago and Kansas City. Since then, carrier circuits have been used to increase the capacity of existing line wires to the point where there are now approximately 7,800 miles of carrier circuits used for telephone service.

Loudspeaker Systems

Loudspeaker systems are used in three types of installations: in freighthouses (for freight checking and paging); in yards (for talk-back communication be-

The new relay office at Armourdale (Kansas City). There are 2 rows of carrier equipment in the rear, of which only 1 row is visible.



Automobiles assigned trainmasters in key terminal areas have been equipped with 2-way radio to improve and expedite the handling of cars and switching. Motorola equipment in the Ford car assigned to a terminal trainmaster.

Pioneer experiments with radio-operated facsimile equipment for transmitting train orders were conducted in 1944 between Blue Island and Joliet, Ill. J. D. Farrington inspects the test equipment at Blue Island.

tween towers, offices and track-side positions in the yard); and in passenger stations (for announcements and paging).

The new Armourdale freighthouse in Kansas City has a 6-checker, 24-station talk-back loudspeaker system with an attendant public address hook-up. A feature of this installation is that the talk-back speakers used on the freighthouse floor are equipped with long extensions so that they can be taken directly into the car or truck being worked. This enables the freight handlers to have both hands free for the movement of freight while calling and receiving information from the checker.

Yard Talk-Back Installations

For yard service, there are 50-station talk-back systems at Armourdale and Silvis, and a 20-station talk-back system at Des Moines. Each of these locations is provided with a tied-in paging system which covers the entire yard area. These yard talk-back installations have resulted in material improvements in speed of handling cars and in yard efficiency—all resulting in lower operating costs and better service. As a result, similar installations are now being mapped for Little Rock and other yards on the system.

The use of public address systems to announce the arrival and departure of trains, car locations, and track assignments is now an accepted feature of better passenger service at larger stations. The Rock Island has so equipped its stations at Peoria, Rock Island, Davenport, Des Moines, Ottawa, La Salle, and six other smaller stations—not including installations at various joint stations. Studies are being made of new installations at three additional locations.

Telegraph and Printing Telegraph

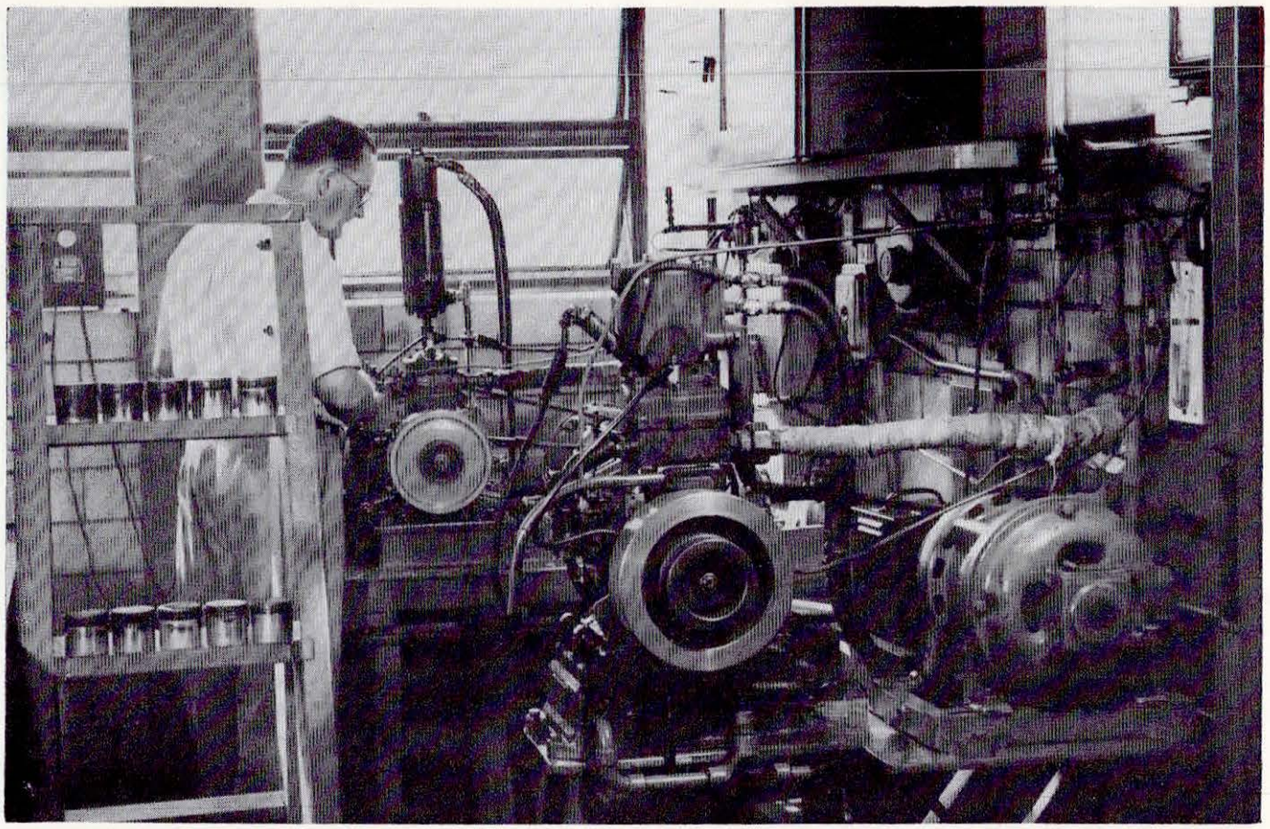
Telegraph circuits link every part of the Rock Island system, with some 18,000 miles of wire in use for Morse telegraph and printing telegraph. The capacity of these facilities has been extended to 4,700 miles of carrier printer circuits.

Telegraphic printers are becoming increasingly important in system operations as advance train consists, wheel reports, and switch lists are used as the basis for mechanized car accounting and for expediting traffic through yards and freight terminals. Telegraphic printers are now located in all principal operating and traffic offices on the system and many off-line points, as well as in all yard offices.

Long-range plans are being mapped for the extension of telegraphic printer circuits to include lines and areas not presently served. The extension of this service is tied in with plans for further mechanization of car accounting and car tracing procedures, and to provide key traffic offices with up-to-the-minute information as to the movement of traffic as well as further expediting the movement of cars and trains through yards and terminals.

A Mechanized System

At the present time, telegraphic printing equipment in service includes 139 printers, 50 reperforators, 49 transmitter-distributors, and 25 perforators. Major printing telegraph circuits interconnect 13 principal relay telegraph offices on the system. Circuits extend from these principal offices to the smaller offices, providing a complete system of communications to and between all points on the railroad.



Samples of lubricating oil are run in these test engines under very carefully controlled conditions. At the end of a specified length of time the piston is removed from the engine and examined. As the sample pistons on the ladder to the left illustrate, this test shows how the oil will actually behave under operating conditions.

Research Strengthens the New Rock Island

Constant, inquiring investigation used as a tool to control costs and improve service

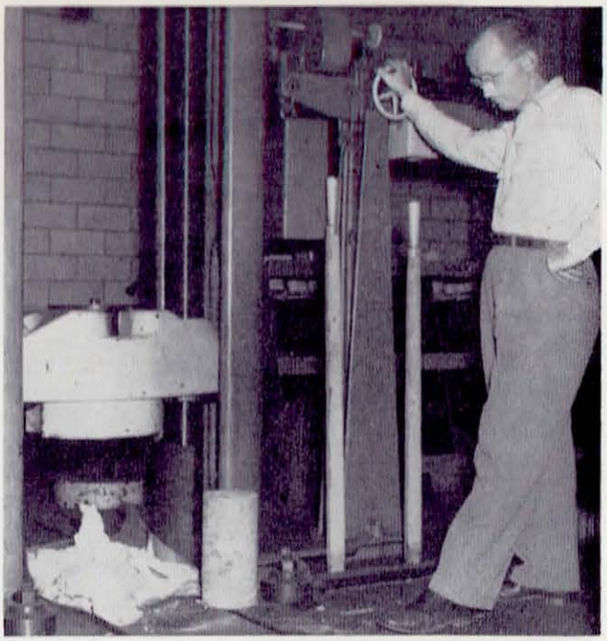
One of the most modern and best-equipped research and testing laboratories in the country devoted exclusively to railroad work is the proud possession of the Rock Island. First established in 1902 as a "testing lab"—one of the first such railroad laboratories in the country—it was subsequently expanded to include research and more extensive testing as a means of reducing expenditures and improving performance. In 1945 it was established in its present home—a new, especially designed and equipped research building. Staffed by 32 employees, including 14 research technicians, under the direction of J. E. Tiedt, engineer of tests (who reports to the vice president–operations) the laboratory performs valuable services for the purchasing, engineering, maintenance, mechanical and executive staffs.

The laboratory building is located immediately adjacent to the road's 47th Street engine terminal in Chicago, and has 16,275 sq. ft. of floor area devoted almost entirely to research work. A striking characteristic of the building is its spaciousness, and the care with which it has been designed to provide for all phases of research, investigation and testing work which are handled. Individual laboratory rooms are set aside for particular functions, each room being well equipped with modern apparatus, located for most efficient utilization.

The individual laboratories within the building are completely equipped to perform all routine tests on water, lubricating oils, metals, paints and protective coatings, insulation and fuels for the mechanical and maintenance departments, as well as regular "quality control" checks requested by the purchasing and stores department on a wide variety of products ranging from lantern batteries to safety goggles. Branch laboratories, staffed by research technicians, are maintained at Silvis, Armourdale (Kansas City), and El Reno to handle tests of water, fuel and lubricating oil used in diesel locomotives. The Silvis branch laboratory also tests scrap metals for special alloys so that they can be properly sorted and sold accordingly.

The research department is also responsible for the

Branch inspection laboratories are maintained at Silvis, Armourdale and El Reno to test water, lubricating and fuel oils used in diesel locomotives. David F. Saunders, chemist at El Reno, is shown here conducting a flash test on samples taken from engines in for servicing.



The research staff has one of the best physical testing railroad laboratories in the country. Here the 300,000-lb. compression machine is being used to test a sample of cement, which has just broken in the machine. An unbroken test cylinder is on the floor in front of the machine.

operation of the Rock Island's owned rail detector car.

The physical laboratory is devoted largely to testing all engineering materials such as steel, iron, brass, bronze, and concrete—including many of the items purchased for storehouse stocks. This laboratory is equipped with a two-ton overhead crane to permit unloading heavy pieces directly from trucks which can be driven directly into the laboratory. Testing machines include 300,000-lb. and 10,000-lb. capacity Riehl tensil and compression testing machines—both equipped with General Electric Thymotrol drive—a fatigue tester, Brinnell (hardness) testers and structural X-ray apparatus. A portion of the facility contains machine tools for the preparation of specimens. Equipment is available to test rails, wheels, couplers, and castings of all kinds.

An important function of the laboratory is the performance of special tests or investigations requested, at one time or another, by almost every department of the railroad. Research and testing are carried on continuously in search of ways to increase service life of materials, and to establish better methods of application and maintenance. The elimination of service failures is the prime objective of this program.

Whenever a new product is being considered—either by the purchasing department or the actual consuming department—it is very often sent to the laboratory for testing in addition to being field-tested by the department concerned.

Lubricating Oil Tests

The lubricating oil problem—a current fascination for many railroads because so little is really known about it—is being constantly studied and probed by the Rock Island.

Tests are run at regular intervals on the lubricant used in each diesel engine, including the conventional viscosity, specific gravity, ash, and flash tests now common practice on most roads operating large fleets of diesels. In addition, tests are run for varnish and resin content; microscopic examinations are made for traces of metal; and ultraviolet "spot" tests are used to indicate the effective additive strength of the oil. Delivery of a new quantitative analysis machine which will report the content of oil samples—including a breakdown of metallic content—is expected this coming winter. When it arrives, accurate readings indicating the condition of diesel engine bearings and liners will be possible. The Rock Island considers a quantitative method of lubricating oil analysis necessary to determine the amount of wear metal in the oil so as to improve lubrication and reduce maintenance of diesel engine parts.

Additive Mixing Policy

Rock Island researchers have become well involved in the problem of oil additives—a field in which there appears to be little unity of opinion. In years past, the railroad's research demonstrated that certain oils—each containing different additives—could be mixed indiscriminately with no harm to the value of the oil, or to the engines in which it is used. Although there is considerable, and often vigorous, disagreement within the railroad and petroleum industries about such a procedure, the Rock Island has stuck by its finding that—under certain conditions—it can be done without harm.

Now, however, the mixing problem is being approached from a new angle. Although the oils specified by manufacturers are stringently observed during the guarantee period on new locomotives, the railroad has about decided to go to one oil for all locomotives serviced at a single terminal. This will greatly simplify the problem of storing and distributing locomotive lubricating oils in shop areas. A central reservoir will be used with pipe and filler hose connections to every service and maintenance area in the terminal. Engines will be filled

directly from a metered hose, thus eliminating manual handling of oil and its attendant, and ever present, opportunities for contamination and error. Current practice is that standard mineral oils meeting Rock Island specifications are purchased, and are mixed with selected additives by the Rock Island at a special mixing plant at Silvis. Oil for use at smaller points is shipped by barrel or tank car from this central storage point.

Water conditioning methods and materials are being continuously investigated in order to develop a better efficiency for steam generators and for use as a diesel engine coolant.

New rail, track fastenings and other specification materials are inspected at the plant by qualified material inspectors before shipment. Fuel inspectors check all fuel before shipment and likewise oversee handling procedures at unloading points to standardize procedures and effect maximum economy in handling costs.

Diesel Heat Tests

Research technicians have recently been devoting attention to detecting diesel engines that run too hot, and uncovering the probable cause of the overheating. In addition to maintaining two large recording thermometers which can be mounted on engines known to be giving trouble, they have designed a special insert plug containing three fusible elements, each with a specific melting temperature. Before its departure on a scheduled run, such a plug can be placed in the cooling jacket of an engine suspected of running hot. Upon its return, the plug can be removed and quickly examined to determine what heat ranges prevailed. Where these tests show trouble, the recording thermometer is then often called into play.

The electrical laboratory—which is accustomed to maintaining delicate instruments—is currently undertaking to check and calibrate all ammeters removed from diesel locomotive cabs during their annual inspection. Steam generator thermostatic stack switches are also checked and regulated. This lab also tests and approves wires, electrical cable, and lamps for various uses.

Recently the mechanical department found that safety goggles which were fully protective under normal conditions could be fragmented very easily in the low winter temperatures which prevail in Iowa and Minnesota.

Repeated impact and deflection tests, conducted with the sample maintained at temperatures ranging from 50 degrees below zero to 150 degrees above, led to the selection of a goggle which will give full protection either in the blazing Texas summer sun or in the bitter cold of a Minnesota winter.

The list of special tests which have passed through the laboratories in the past few years is long, varied, and an excellent lesson in the multitude of values of research.

The significance to the Rock Island of this entire research project lies in its unending search for better, more economical products, and constant checking to be sure established specifications are being met. The entire Rock Island management looks upon research as one of the tools necessary for the proper, efficient and economical operation of a modern railroad.

Economy and Efficiency in

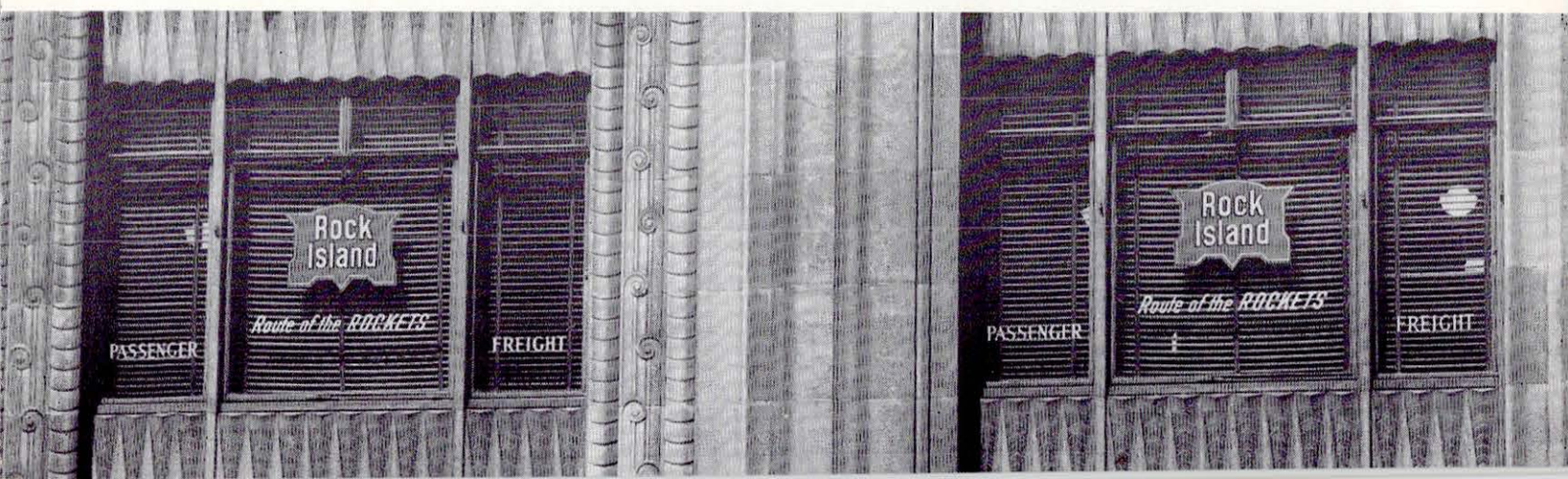
Purchasing & Stores Practices

When Mr. Farrington came to the Rock Island the credit and the finances to make essential improvements were not available. He inaugurated an intensive scrap drive to turn idle property into cash. Tracks not needed were abandoned, old wornout equipment was destroyed, and resulting metals were rushed to the purchasing and stores department for grading to get the highest sale price and to reclaim from scrap any usable materials. The results were gratifying and came to an increased revenue of over one million dollars in the first year of operations in the value received just from the sale of scrap.

Resulting perhaps from the stringent training of the hard days, purchasing and stores continues an unusually thrifty operation. Attention has been given every phase of the operation, in the interest of improving efficiency, and in the interest of keeping the capital invested in inventory both fluid and within strict limits.

Leader in Mechanization

The Rock Island has been a leader in the mechanization of materials handling—even going so far as to design special equipment to facilitate handling bulky and difficult articles—such as traction motors. Various sizes of fork-lift trucks, hand- and power-operated jacks,



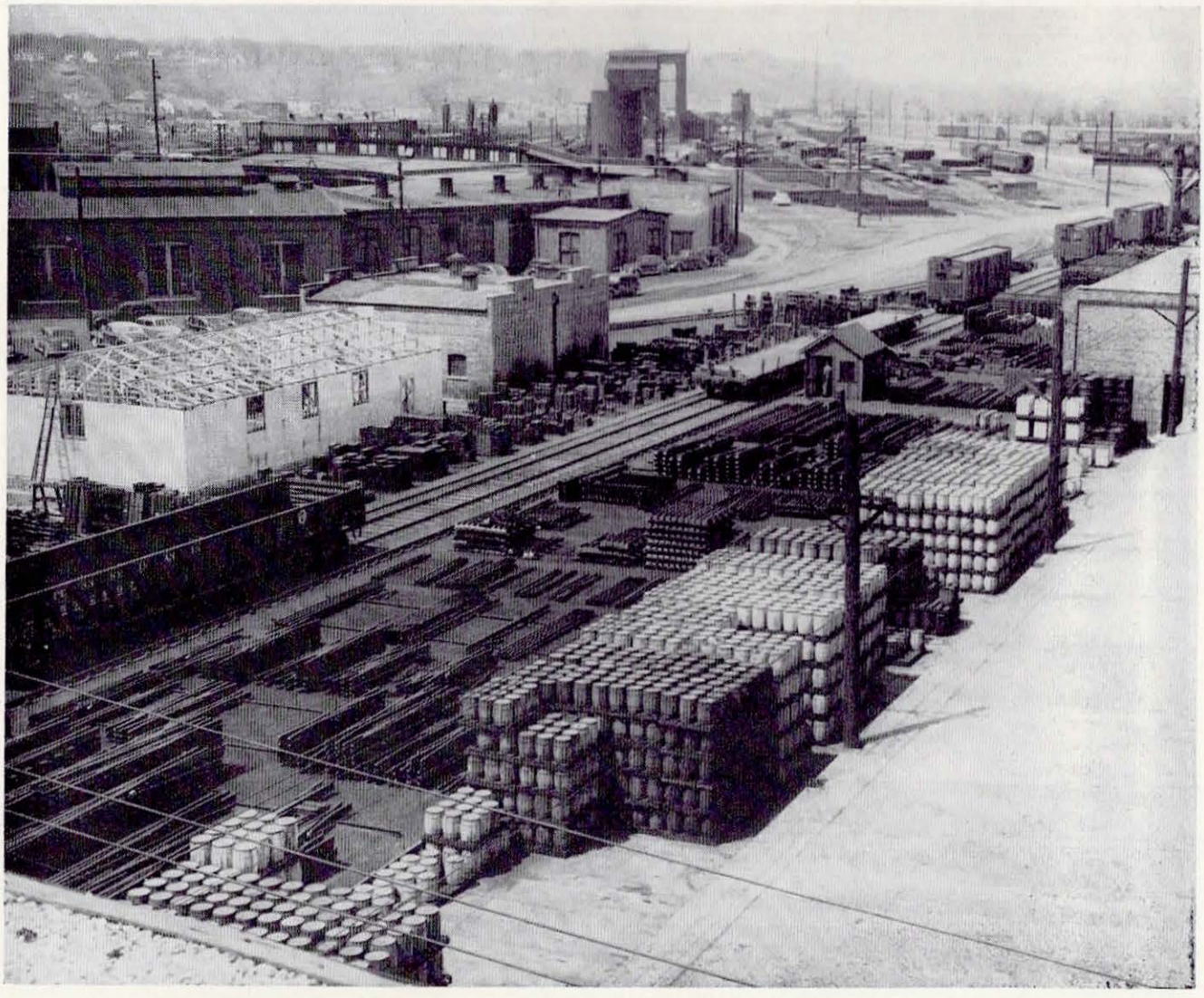
and platform tractors and trains are used. The object of the stores department has been to cut to the bone the cost of handling.

The road has broken away completely from traditional practices in the handling of repair parts for maintenance-of-way work equipment. Repair materials are no longer turned over to the using department when they are received, but are stored in a modern central depot in Herington, Kan., adjacent to the maintenance-of-way equipment repair shop. Such material is now handled in the same manner as supplies for other departments. This arrangement has resulted in approximately a 20 per cent reduction in the physical volume of repair parts which must be carried in stock.

Last January a new "single item" stock card system was introduced, replacing the single item sheet formerly used. A 5-in. by 8-in. Kardex card is designed for a perpetual inventory record. Stock is taken and orders are placed monthly. Material identification is placed on the card from Addressograph plates in the general storekeeper's office. The cards are reversible and have provision for all necessary receipt and record information.

A cost figure is kept on the card for local information and for the information of the user. Shop tickets are not priced, however, because all pricing for accounting records is now handled in the accounting department as a part of its newly mechanized system (described elsewhere in this issue). One copy of the shop ticket goes to the accounting department, and one copy to the central storekeeper's office for entry into the perpetual inventory records. Material receipts are entered in the records from invoices immediately after they are checked.

The Rock Island was one of the first railroads to experiment with mixing lubricating oils, as a result of research conducted jointly by the purchasing and stores, mechanical and research departments. This was done in order to permit quantity purchases, and to simplify storage and handling. This program proved workable. Further refinement is the goal of its current revision. The new arrangement will call for purchasing standard mineral oils, with the stores department mixing in additives according to a formula developed by the research and mechanical departments. The mixing will be done at the stores department's modern oil storage and reclamation plant at Silvis. This program will simplify purchasing, storage and handling coincident with the maintenance of high specification standards. The Rock Island is one of the first railroads to develop such a procedure.



General view of maintenance-of-way material yard showing track materials and oil house.

In the dining car, the food is kept in these specially designed food lockers which maintain a constant temperature of 10 degrees below zero.

FROZEN FOODS

What the Rock Island is doing to keep the dining car deficit under control without alienating customers

In common with other railroads, the Rock Island has been plagued with rapidly increasing dining car deficits. By 1950 they had reached the point where it was agreed corrective measures were necessary. A committee of representatives from the dining car, operating, passenger and executive departments studied the operations and techniques of air lines and other railroads and solicited advice from purveyors of foodstuffs before deciding what course should be followed. The problem, as every dining car man knows, quickly resolved into one of reducing waste and spoilage, and reducing the number of man-hours required to serve a single meal.

"Experiments with other suggested solutions," Merle J. Reynolds, manager of dining car services, recalls, "such as restricted menu selections, blue plate service, and the like, had shown us that these were but mere palliatives; they reduced the dining car losses somewhat, but nowhere near the amount necessary. We considered trying to establish centralized kitchens at key locations on our lines, but our passenger trains are so scattered at meal hours that their operation would be highly impractical." Further study and exploration led to a bold decision: to turn to the use of precooked quick-frozen foods, prepared and frozen in a single commissary kitchen in Chicago.

"Studies disclosed one of our basic troubles lay in the fact that 7 out of every 10 passengers ordered a la carte meals," Mr. Reynolds said, "and that the problem of stocking and operating a dining car for a large a la carte business incurs considerable waste. Resistance to ordering complete meals seemed to have its roots in the high prices which prevailed on dining cars generally. A switch to the use of frozen foods would allow price reductions without sacrificing quality."

In undertaking the large-scale use of precooked quick-frozen meals, the dining car department has necessarily had to do a great deal of pioneering because this is a new branch of food chemistry of which little is known, with no large backlog of experience which can be drawn upon. "We had to acquire a completely new orientation to the food problem," Mr. Reynolds explains, "to perfect entirely new procedures and techniques. There has necessarily been a period of adjustment and acclimatization while our staffs and crews acquire experience and familiarity."

Although the service is still new—the centralized kitchen in Chicago was not completed until last March, and only seven out of 25 diners have been converted to handle frozen foods—it is beginning to get on an even keel. Passenger acceptance is indicated by the fact

Once frozen and packaged the precooked food is held in storage in the Chicago "Rocket Food Center."

Supplies are drawn from the freezer as needed for stocking cars in the same manner as other supplies.

that although meal prices have been reduced an average of 15 per cent (which is the equivalent of a $160,000 revenue loss), revenues from meals have increased $25,000 in the first six months of operation. And in August only two out of every ten passengers ordered a la carte meals on cars offering the new frozen foods, a marked improvement. In the same period, total dining car operating expenses were reduced $91,000. Improved revenues and reduced expenses have resulted in a net saving of about $116,000 in the first seven months of this year.

The heart of the new system is a completely new kitchen, quick-freezing, and frozen-food storage plant, known as the "Rocket Food Center," at the 51st Street Commissary in Chicago. Here all foods are prepared to exacting standards, quick-frozen, and then stored until actually needed for use. The operations of this facility are under the direction of a trained food chemist. Frozen meals can be stored for long periods without damage—so long as they are maintained at below-zero temperatures.

The kitchen operates on a production-line basis, working on only a few menu items each day. Thus the meat chef might devote one day to the preparation of a roast beef dinner; the next day, chicken; the following day, fish; and so on.

An interesting and novel feature of the Rock Island's system (when it is in full operation) is the fact that almost everything used in the dining car is quick-frozen: bread, coffee rolls, pies, cakes, soups, and juices—in addition to the meat, potato and vegetable course. Nearly everything used—even ice cream—is prepared in the Chicago kitchen.

Eventually all diners will be shopped and equipped with a custom-built frozen food storage cabinet capable of maintaining a constant temperature of 10 degrees below zero, or lower. The conventional stoves and ovens are now being removed and replaced with thermostatically controlled propane gas ovens especially designed for reconstituting* precooked frozen foods. The frozen food is placed in these ovens for a certain number of minutes (the time varies according to the article being reconstituted). Once heated to the proper serving temperature it is placed on dinner plates and served in the conventional manner.

Two subcommissaries are being constructed: one at Minneapolis and the other at El Reno, Okla. These are in effect walk-in deep-freeze lockers where supplies can be stored until needed. They will be used to stock cars used on the Choctaw and Mid-Continent routes, thereby eliminating the necessity for these cars being taken out of line for routing into Chicago. Supplies will be shipped to these subcommissaries from the Chicago kitchen in specially insulated refrigerator cars.

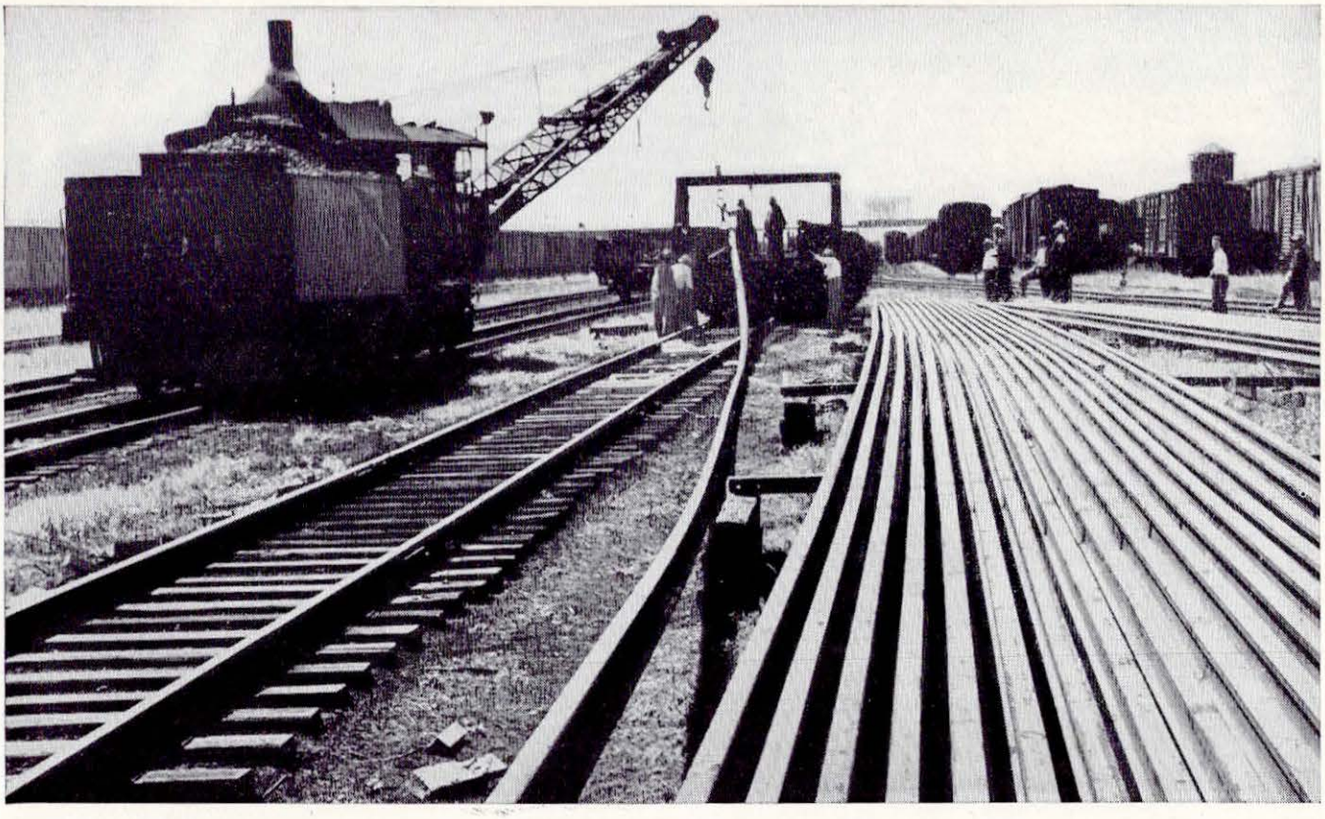
No one has expected such a radical change in dining car service to come into being without a period of readjustment. An integral part of the program is the extensive training being given all dining car crews in the proper handling and preparation of frozen foods. A general school is being operated at the Chicago commissary to which all dining car crews are being brought for basic instruction. Each employee receives three two-hour lessons, in addition to attending group meetings, talks and discussions on general aspects of the program.

This training program is continued on the cars by three road inspectors who give on-the-job instruction and help the crews overcome individual problems as they occur. In addition, instruction classes are held before and after each trip, during the period when the service is being first introduced.

It is still too early to evaluate the probable effects of this over-all program on the road's dining car deficits. Only 7 out of 28 regularly scheduled diners which will eventually serve this new food are now equipped and in service and there are many problems yet to be solved. It is inevitable that such a major change—involving so much pioneering work—should hit some rough spots. However, impartial observation indicates that the service improves with the passing of time and the accumulation of greater experience. When properly prepared and served, the meals meet with popular acceptance, and the lower prices do stimulate trade. It seems probable that by the end of 1953—and allowing for continued inflation—the program will effect a substantial reduction in the Rock Island's annual dining car deficit.

*Reconstituting precooked quick-frozen meals consists of restoring to the food the heat that was removed when it was frozen. Varying amounts of heat are removed from different foods in the quick-freezing process, so the time for reconstituting varies accordingly. The foods are not left in the ovens long enough to renew the cooking process.

Ribbonrail Service helps smooth the "ROAD OF PLANNED PROGRESS"



One hundred years ago Rock Island's first locomotive, the ROCKET, hissed and rattled from Chicago to Joliet on the road's first stretch of 56-lb. imported English rail. Since that time the "Road of Planned Progress" has pioneered in developing safer, smoother-riding rail on which diesel-powered ROCKETS now speed.

OXWELD'S RIBBONRAIL Service is an important recent advance in the Rock Island's program of progress. The illustration shows some of the 1500 ft. rail lengths that are being installed in open track between Spring Valley and Peru, Illinois. This continuous welded rail eliminates all joint maintenance costs, gives longer life to the rail and provides a smoother ride for Rock Island high-speed ROCKETS.

OXWELD is pleased with the part that RIBBONRAIL Service is playing in the plans of this 100-year-old American railroad.

OXWELD RAILROAD SERVICE COMPANY
A Division of Union Carbide and Carbon Corporation
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Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

Income Items	United States For the month of June 1952	1951	For the six months of 1952	1951
1. Net railway operating income	$67,900,110	$65,818,234	$442,007,172	$397,623,123
2. Other income	25,385,940	28,147,464	108,447,365	117,874,472
3. Total income	93,286,050	93,965,698	550,454,537	515,497,595
4. Miscellaneous deductions from income	3,775,683	3,638,915	24,649,457	29,127,337
5. Income available for fixed charges	89,510,367	90,326,783	525,805,080	486,370,258
6. Fixed charges:				
6–01. Rent for leased roads and equipment	11,429,739	9,707,931	62,155,119	56,986,469
6–02. Interest deductions[1]	25,956,849	25,042,222	155,145,752	149,042,269
6–03. Amortization of discount on funded debt	253,737	236,450	1,432,421	1,388,854
6–04. Total fixed charges	37,640,325	34,986,603	218,733,292	207,417,592
7. Income after fixed charges	51,870,042	55,340,180	307,071,788	278,952,666
8. Other Deductions	2,882,097	3,182,432	17,438,448	18,553,163
9. Net income	48,987,945	52,157,748	289,633,340	260,399,503
10. Depreciation (Way and structures and Equipment)	40,364,540	39,000,398	237,845,784	229,329,795
11. Amortization of defense projects	.....	.....	.....	.....
12. Federal income taxes	31,759,146	43,224,026	266,560,210	255,801,282
13. Dividend appropriations:				
13–01. On common stock	19,049,391	16,943,267	113,226,693	107,930,166
13–02. On preferred stock	1,646,591	2,286,343	40,161,027	57,392,100
Ratio of income to fixed charges (Item 5 ÷ 6—04)	2.38	2.58	2.40	2.34

Selected Expenditure and Asset Items	United States Balance at end of June 1952	1951
17. Expenditures (gross) for additions and betterments—Road	$176,134,697	$152,474,706
18. Expenditures (gross) for additions and betterments—Equipment	539,112,792	507,688,230
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	482,528,124	472,318,096
20. Other unadjusted debits	106,980,447	117,543,767
21. Cash	806,946,436	821,039,264
22. Temporary cash investments	820,544,413	857,251,142
23. Special deposits	88,669,222	123,782,079
24. Loans and bills receivable	1,156,768	1,846,872
25. Traffic and car-service balances—Dr.	59,298,042	55,234,180
26. Net balance receivable from agents and conductors	154,545,216	161,164,851
27. Miscellaneous accounts receivable	396,537,070	418,072,811
28. Materials and supplies	904,853,069	880,169,951
29. Interest and dividends receivable	15,035,676	14,617,156
30. Accrued accounts receivable	221,859,697	220,122,156
31. Other current assets	33,478,050	34,561,415
32. Total current assets (items 21 to 31)	3,502,923,659	3,587,861,877
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$154,287,661	$159,281,081
41. Loans and bills payable[3]	4,248,381	11,704,167
42. Traffic and car-service balances—Cr.	104,030,996	104,415,681
43. Audited accounts and wages payable	545,474,399	551,546,953
44. Miscellaneous accounts payable	215,769,602	247,136,642
45. Interest matured unpaid	47,949,420	44,866,413
46. Dividends matured unpaid	19,363,935	15,898,012
47. Unmatured interest accrued	61,961,152	60,719,748
48. Unmatured dividends declared	20,754,340	23,597,033
49. Accrued accounts payable	250,900,402	230,609,049
50. Taxes accrued	757,455,022	808,158,424
51. Other current liabilities	95,613,445	95,011,540
52. Total current liabilities (items 41 to 51)	2,123,521,094	2,193,663,662
53. Analysis of taxes accrued:		
53–01. U. S. Government taxes	573,113,771	625,896,713
53–02. Other than U. S. Government taxes	184,341,251	172,261,711
54. Other unadjusted credits	298,092,628	297,445,051

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

CONSTRUCTION

Atchison, Topeka & Santa Fe.—A contract covering pier protection for a bridge over the Sanitary District Canal near McCook, Ill., has been awarded to the Fitz Simons & Connell Dredge & Dock Co., of Chicago.

Canadian National. — The new main building at Jasper Park Lodge, in the Canadian Rockies, which will replace the structure destroyed by fire on July 15, will be one-third larger than the original main structure and will be turned over to the CNR by the contractors by mid-May 1953, to be ready for complete operation when Jasper opens in mid-June. While concrete and steel will be used in construction of the new one-story building from the fireproof point of view, every effort will be made to carry out the existing rustic type of exterior and interior that prevails in adjoining guest cabins. The new dining room will be much larger than the old one, seating more than 600 persons at one sitting. Executive offices, guest registration, shops, etc., along with the dining room, ball room and ticket offices will be on the raised main floor, while immediately below will be rest rooms, recreation rooms, convention rooms, etc.

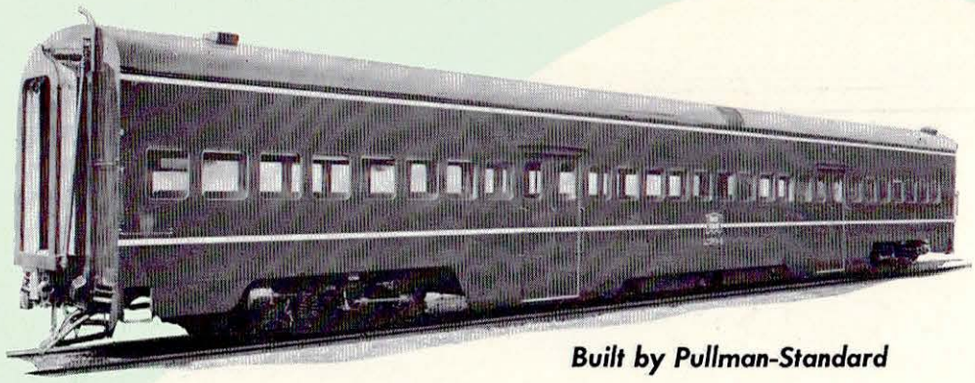
New York Central-Chicago, Rock Island & Pacific.—Twin escalators will be installed in the LaSalle Street station at Chicago, at a cost of more than $100,000. They will extend from the ground level to the train floor, parallel to the existing stairway, which will remain. The escalators will normally run in opposite directions, but can operate in the same direction to facilitate flow of rush hour passengers. Installation is expected to be complete before the Christmas holiday season.

Pennsylvania.—Levitt & Sons, Inc., has been awarded a contract to construct a new passenger station at Levittown, Pa. Work is expected to be completed by early spring. The building, measuring 27 ft. by 50 ft., will be of native fieldstone and will house a waiting room, a ticket office, and baggage and rest rooms. Platforms will be 300 ft. long with 100-ft. shelter sheds, on both sides of the main line.

Briefly...

. . . The Southern has received the 1952 award of the Deep South district of the Advertising Federation of America as "the southern advertiser making the greatest contribution to southern advertising." Harry A. DeButts, president of the Southern, accepted the award on the road's behalf at the annual convention of the Deep South district in Birmingham, Ala., on September 13. It was the first award of its kind ever presented by the district.

. . . Believed to be the heaviest single car shipment ever made by rail in Canada, a total of 185 tons was loaded on a Canadian National flat car at Sorel, Que., on September 18. A special section of track had to be laid, switches were removed and all clearances between Sorel and Toronto had to be checked carefully before the load was authorized to travel. The shipment is a 167-ton stator core, to be used in a new power development project by the Ontario Hydro Commission at Toronto. Worth $250,000, it was manufactured in England.



Built by Pullman-Standard

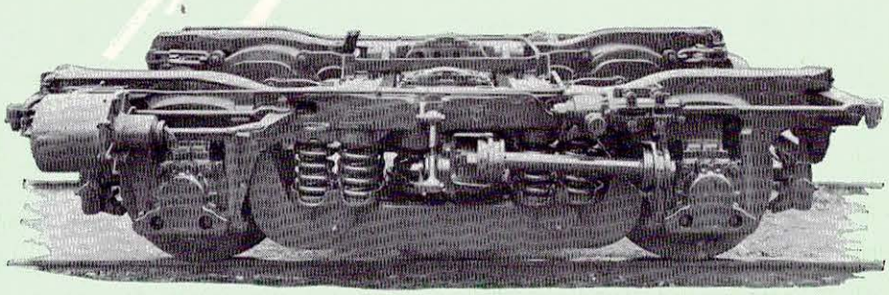
Congratulations

A CENTURY OF SERVICE
1852 · *Rock Island Lines* · 1952

to the ROCK ISLAND on 100 Years of Progressive Service

General Steel Castings salutes the Rock Island Lines on completing a century of service to America. In recent years they have achieved an unusual record of modernization and progressive management.

As part of this modernization program, and to better serve the Chicago suburbs, the Rock Island Lines is now operating 20 new streamlined coaches especially designed for diesel-powered suburban trains. These coaches are equipped with COMMONWEALTH Trucks, assuring smooth riding and minimum maintenance costs.



Commonwealth Passenger Car Truck for Rock Island Suburban Cars

GENERAL STEEL CASTINGS

GRANITE CITY, ILLINOIS EDDYSTONE, PENNSYLVANIA

Saluting the Rock Island at its Centennial

For more than 15 years we have been privileged to associate with the Rock Island Railroad as a supplier of Crossties.

HOBBS WESTERN CO.

611 Olive Street, St. Louis 2, Missouri

Producing in these areas: Arkansas, Missouri, Louisiana, Oklahoma, Texas, Tennessee, Kentucky

Best Wishes to the

Rock Island Lines

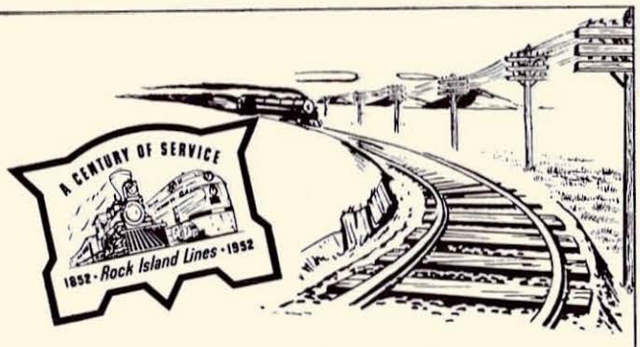
CATERPILLAR ENGINES

EARTHMOVING EQUIPMENT

Lorain Cranes • Jaeger Pumps - Compressors • Construction Equipment •

MARTIN-ROASA TRACTOR & EQUIPMENT CO.

Davenport, Ia. CEDAR RAPIDS, IOWA Hannibal, Mo.



Congratulations

Rock Island Lines

on your 100 years of progress

We are proud that Interlake's Coal Tar Creosote is a part of your excellent maintenance program.

Interlake IRON CORPORATION

COAL CHEMICALS DIVISION

OFFICES:
Union Commerce Bldg., Cleveland 14, Ohio
PLANT: South Chicago, Illinois

ORGANIZATIONS

A.A.R. Members to Meet In N. Y. November 21

The annual meeting of member roads of the Association of American Railroads will be held at the Waldorf-Astoria Hotel in New York on November 21. It will be preceded on November 20 by a meeting of the association's board of directors.

Trucking Industry Holds 19th Annual Convention

More than 2,500 trucking industry leaders from all parts of the country attended the five-day convention of the American Trucking Associations at the Waldorf Astoria Hotel in New York City. The convention opened on October 5.

Walter F. Mullady, president of the A.T.A. said the industry in 1952 would exceed last year's records for the total number of vehicles in operation by more than 300,000 and that wages and total employment also would top last year's record figures. In 1951, the trucking industry gave direct employment to 6,009,000—second only to agriculture as an employer—and had a total payroll of $21,031,500,000, he said. It now operates more than 9,000,000 vehicles compared with 8,623,090 in 1951.

"In 1951," Mr. Mullady said, "the trucking industry established new records in tonnage hauled, equipment operated, investment in new equipment, employment, payroll, and intercity ton-miles of freight service. Tonnage, for example, was 15 per cent above 1950, which in turn was 25 percent above 1949.

"Reversals during the first two quarters of this year probably will prevent establishment of another record in tonnage. Third-quarter tonnage, however, has been about the same as that for 1951, and fourth quarter tonnage is expected to exceed last year's fourth-quarter tonnage. Intercity ton-miles of freight service also probably will match the 137 billion ton-miles of 1951, which compared with 126 billion in 1950. Approximately three billion dollars is expected to be invested in new trucks, tractors and trailers before the year's end, a total very close to the investment of $3,300,000,000 last year."

Accounting Division Will Meet June 2-4 at Chicago

The 1953 annual meeting of the Accounting Division, Association of American Railroads, will be held at the Edgewater Beach Hotel, Chicago, from June 2 to 4, inclusive. It will be preceded on June 1 by the usual "open house" meetings of the division's standing committees.

This was announced in a September 22 circular issued by the division's chairman—E. Hart, comptroller of the Pennsylvania. The circular also announced that F. E. Martin, vice-president and comptroller of the Illinois Central, had been designated chairman of the committee on arrangements for the meeting.

The **Traffic Club of Houston** and the **Houston Chapter of Delta Nu Alpha Transportation Fraternity** will hold a joint dinner on October 28, in the Rice Hotel. Charles S. Baxter, chairman of the Railroads' Tariff Research Group, will be guest speaker.

To "stimulate interest in transportation as a profession, and to develop trained personnel for the transportation field," the **Cincinnati Traffic Club** has announced scholarships in transportation and traffic management courses at the University of Cincinnati and Xavier University. There will be one scholarship at each institution, open to any male or female student in first year subjects. Awards will be made in May 1953, for the 1953-54 season. Faculty committees on scholarship, assisted by the traffic club's educational committee, will decide on the winners.

The **American Society for Testing Materials** has elected Robert J. Painter as executive secretary and Raymond E. Hess, associate executive secretary and editor in chief. Mr. Painter formerly was treasurer and assistant secretary and Mr. Hess assistant executive secretary and editor.

The **Chicago Regional Chapter** of the **Association of Interstate Commerce Commission Practitioners** has elected Carl O. Gustafson, assistant

A HISTORY OF THE KATY IS PUBLISHED

VINTAGE VERSION of the Missouri-Kansas-Texas' "Katy Flyer" — complete with 4-4-0 locomotive and five freight and passenger cars—was donated to the St. Louis Museum of Transport on September 25 (right). The occasion marked publication of the history of the road—"The Katy Railroad and the Last Frontier"—written by V. V. Masterson. Here Mr. Masterson watches Donald V. Fraser, president of the road, formally present the historic train to Dr. John P. Roberts, president of the museum, during brief, colorful ceremonies at St. Louis Union Station.

AN OVATION was received by author Masterson (below) from more than 800 persons assembled at a luncheon held following the trainside ceremonies. After Mr. Fraser formally announced publication of the book, he told of long research by Mr. Masterson for authentic material on Southwestern railroad development. Dr. Savoie Lottenville, director of the University of Oklahoma Press, which published the work, termed it "the most skilled example of the historian's craft I have ever seen." Descendants of several Katy pioneers were honored guests at the luncheon.

"Tailor-made" for Railroad Diesels

Esso Diesel Lubricating Oil

A HIGH-QUALITY LUBE FOR REAL PROTECTION—Esso offers "tailor-made" diesel locomotive lubricating oil (Diol RD) developed through years of field testing and research by both engine designers and Esso scientists to meet needs of railroad diesels. High-quality Esso Diol RD gives dependable lubrication protection.

BACKED BY CONSTANT RESEARCH—continuing tests in the lab and on the road make sure that Diol RD keeps pace with progress and latest developments in railroad diesels.

BACKED BY CONSTANT FOLLOW-UP—on-the-job check-ups by Esso Sales Engineers watch the dependable performance of Esso Railroad Fuels and Lubricants. Be sure to call on Esso for any railroad fuel or lubricating problem.

The Sign of QUALITY

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RAILROAD PRODUCTS

SOLD IN: Maine, N. H., Vt., Mass., R. I., Conn., N. Y., N. J., Penna., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY — Boston, Mass. — New York, N. Y. — Elizabeth, N. J. — Philadelphia, Pa. — Baltimore, Md. — Richmond, Va. — Charleston, W. Va. — Charlotte, N. C. — Columbia, S. C. Memphis, Tenn. — New Orleans, La.

freight traffic manager, Minneapolis & St. Louis, as general chairman for the coming year. Other newly elected officers are: Eugene Landis, general traffic manager, International Minerals & Chemical Corp., vice-chairman; A. E. Lohse, assistant traffic manager, Inland Steel Company, secretary; and W. H. Herrin, assistant freight traffic manager, Southern Pacific, treasurer.

The **Traffic Club of East Texas** recently elected the following officers: President, Ira P. Hildebrand, owner, Hildebrand Warehouse Company, Tyler Tex.; first vice-president, H. C. Carswell, Jr., general agent, Missouri Pacific, Tyler; second vice-president, T. H. Walker, traffic manager, R. G. LeTourneau, Longview, Tex.; and secretary-treasurer, Autry Cantrell, secretary, Missouri Pacific Lines Traffic Agency, Tyler.

A meeting of the **Traffic Club of New York,** to be held at the Biltmore Hotel, New York, on October 14, has been designated "Mexican Night." The entertainment will include native Mexican music with dancers and singers.

The **Railway Business Woman's Association of Chicago** will hold a dinner meeting at the Columbia Yacht Club on October 21.

The newly formed **General Agents Association of Houston,** Tex., has elected N. L. Cullom, of the Chicago & Eastern Illinois, as president; R. W. Sager, of the Rock Island, vice-president; and J. L. Cooper, of the Canadian National-Grand Trunk, secretary-treasurer.

The seventh annual convention of the **National Defense Transportation Association** will be held in New York City October 26 through 29. Among those scheduled to address the convention are former Under Secretary of the Army Karl R. Bendetsen; Maj. Gen. Frank A. Heileman, Army Chief of Transportation; and Kenneth L. Vore, head of the Military Traffic Service.

J. P. Newell, vice-president—operation of the Pennsylvania, will be the speaker at the dinner meeting of the **New York Railroad Club** in the Century Room, Hotel Commodore, New York, at 7:00 p.m. on October 16. His subject will be "The Passenger Deficit." A reception period of about an hour will precede the dinner.

The **Stock Yards District Traffic Club** (Chicago) will hold its annual dinner and installation of officers on October 16 at the club rooms of the Central Manufacturing District, 1106 W. 35th street. Elmer E. Aird, traffic manager, United States Cold Storage Company, was elected president of the club; W. J. Heerman, Central Manufacturing District agent of the Wabash, vice-president; J. G. Regis, traffic manager, Victor Manufacturing and Gasket Company, treasurer; and R. H. McNally, freight traffic representative of the Rock Island, secretary.

The **Traffic Club of Cleveland** has announced that its annual, formal dinner will be held in the Hotel Cleveland on February 5.

Thomas J. Tobin, vice-president and comptroller of the Erie, has been re-elected vice-president and a trustee of **Controllership Foundation, Inc.,** the research body of the **Controllers Institute of America.**

Ralph Champlin, vice-president, public relations, of the Pennsylvania, will be one of the featured speakers at an October 23 conference in St. Louis sponsored by that city's chapter of the **Public Relations Society of America.**

Nancye B. Staub, president of the Association of Bank Women, will be the speaker at a dinner meeting of the **Women's Traffic Club of New York,** on October 14, in the Tower Club of the Park Sheraton Hotel, New York, at 7:00 p.m. Her subject will be "Where There's a Will There's a Way."

Bi-monthly list of Meetings and Conventions begins on page 180.

OVERSEAS

Three-Train British Wreck Kills 85, Injures 170

Great Britain's worst railroad wreck since 1915—a three-train collision at Harrow during the morning rush hour on October 8—resulted in the death of at least 85 persons, and injury to 170, according to the first reports to reach this country.

The accident, these reports said, occurred when the "Night Scot," southbound from Perth to London, running 95 minutes late at an estimated speed of 55 m.p.h., collided with a surburban local which had stopped at Harrow to take on commuters bound for London, 11 miles away. The force of the collision threw wreckage across an adjoining track, directly into the path of an express train outbound from London to Manchester.

There were, reports stated, about 1,000 persons aboard the three trains; some 600 of these were said to have been on the local. Some of the deaths and injuries apparently occurred, however, on the Harrow station platforms and on a footbridge over the tracks, which was partially demolished as a result of the collision.

U.S. Air Force medical corpsmen from nearby air bases were officially thanked by the British Ministry of Transport for "magnificent" work in giving medical assistance to the injured.

SUPPLY TRADE

Karl M. Kline has been appointed manager of railroad sales of the **Line Material Company.** He has been with the company since 1917, starting as a salesman in the Southwest, and later

Karl M. Kline

transferring to the New York district as sales representative. Mr. Kline then became assistant to the vice-president in charge of sales, and afterwards held other positions in the company's sales department.

R. R. Huntington has been appointed sales engineer in Louisiana, Mississippi and eastern Texas for the **Joseph Dixon Crucible Company.**

KSM Products, Inc., manufacturer of welding studs and stud welding equipment, has moved to a new, larger plant near Merchantville, N.J.

M. B. Beline has been appointed director of national accounts of the **Quaker Rubber Corporation,** division of the **H. K. Porter Company.** Mr. Beline, who has been with the Porter Company for several years in the Washington, D.C., office, will coordinate the activities of Quaker's field personnel with the factory, to provide assistance on preliminary engineering, specifications and service.

The **Aluminum Company of America** will construct a large aluminum-smelting project in Alaska as soon as the necessary land can be purchased and required governmental approvals obtained. The project will be in the Taiya Valley district, near Skagway, and will cost aproximately $400,000,000. The facilities initially would be capable of producing some 200,000 tons of aluminum annually. From the time of starting, it is thought it will take four years to complete the project and start aluminum production there.

William O. Springer has been appointed manager of the New York plant of **Joseph T. Ryerson & Son.** Mr. Springer formerly managed the firm's

Congratulations

1852 Rock Island 1952

ON YOUR NOTABLE CONTRIBUTION
IN THE DEVELOPMENT
OF THE GREAT MID-WEST
OVER THE PAST 100 YEARS

W. H. MINER, INC. · CHICAGO

J. G. Wilson, who has been named engine sales supervisor in the sales development division of Caterpillar Tractor Company

Cleveland plant. **James M. Mead**, whom Mr. Springer replaces at New York, is moving to the executive offices at Chicago for special administrative duties. **John W. Queen**, formerly alloy steel division manager at Chicago, has succeeded Mr. Springer at Cleveland.

The **Reynolds Metals Company** has increased the annual capacity of its Longview, Wash., plant from 60,000,000 to 100,000,000 lb. of pig aluminum.

C. B. McGehee has been made vice-president of the **Truscon Steel Company**, a subsidiary of the **Republic Steel Corporation.** Mr. McGehee previously was general manager of sales of Truscon.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The Pressed Steel Car Company has received orders from two Brazilian railroads for 1,930 freight cars costing about $12,000,000. The **Estrada de Ferro Sorocabana** ordered 1,000 40-ton box cars, 300 stock cars and 200 high-side gondola cars. Negotiations for financing this purchase through a dollar loan are being conducted by the state of Sao Paulo, which owns the road. The **Paulista** ordered 430 50-ton box cars, which will be financed by the Export-Import Bank without participation by Pressed Steel Car. All cars will be manufactured in the Mt. Vernon, Ill., plant.

LOCOMOTIVES

The **Alaska** has ordered six 1,500-hp. diesel units from the Electro-Motive Division of General Motors Corporation. Delivery is scheduled for completion by December 31.

MARINE

The **Reading** has ordered four diesel tugboats from the RTC Shipbuilding Corporation, Camden, N.J.

IRON & STEEL

The **Pennsylvania** has ordered 75,000 net tons of steel rail costing $5,737,000. Orders were placed with the United States Steel Company, the Bethlehem Steel Company and the Inland Steel Company. Delivery of the rail—which is to be about equally divided among 155-lb., 140-lb. and 133-lb. types—is scheduled to begin in January.

ABANDONMENTS

Chicago & North Western.—The I.C.C. has postponed, for an indefinite period, the effective date of its recent order authorizing this road to abandon its 28.1-mile line between Plymouth, Wis., and Fond du Lac (*Railway Age*, September 15, page 98). Protestants asked for more time in which to file petitions for reconsideration.

Seaboard Air Line.—The I.C.C. has postponed, for an indefinite period, the effective date of its recent order authorizing this road to abandon segments totaling 64.9 miles in the area of Fort Myers, Fla. Protestants asked for more time in which to file their petition for reconsideration (*Railway Age*, September 15, page 100).

Application has been filed with the I.C.C. by:

LONG ISLAND.—To abandon segments totaling 11.3 miles, as follows: Glendale cut-off, 1.6 miles; a 6.4-mile segment of the Rockaway Beach branch, and a 3.3-mile segment of the Far Rockaway branch. The road has entered an agreement with New York City providing for the sale of this trackage to the city for inclusion in the city's rapid transit system. Until this sale is consummated the LI will continue operation of the lines under lease from the city.

MOUNT CARMEL-READING.—To abandon the former's entire line, 5.9 miles, in Northumberland county, Pa. The line is operated by the Reading. The owner of coal deposits underlying a portion of the railroad plans a strip mining operation, and his right to do so has been upheld by the Pennsylvania Supreme Court, the roads said.

Division 4 of the I.C.C. has **authorized:**

CHESAPEAKE & OHIO.—To abandon approximately 8,427 feet of branch line (Wheelwright subdivision) in Floyd county, Ky. Operation over an additional 170 feet will be abandoned, but this segment will be retained as a team track. The station at Wheelwright will be moved to Wheelwright Junction. Coal mines served by this branch have been abandoned.

CHICAGO GREAT WESTERN.—To abandon its branch line between Belle Chester Junction, Minn., and Belle Chester, 5.5 miles. Neither present nor prospective traffic is sufficient to warrant retention of the line, Division 4 said.

LOUISVILLE & NASHVILLE.—To abandon its 26.7-mile branch line from Shelbyville, Ky., to Bloomfield. The road will leave in place approximately 3 miles of track at Shelbyville, for use as an industry or way switching track.

MURFREESBORO & NASHVILLE.—To abandon its entire line, approximately 14.9 miles, from Murfreesboro, Ark., to Nashville.

NEW YORK, NEW HAVEN & HARTFORD.—To abandon a 1-mile segment of branch line, extending from East Milton, Mass., to a point just south of West Quincy station.

OREGON SHORT LINE (Union Pacific).—To abandon a 3.4-mile branch line, extending from Gardner Junction, Idaho, to Peterson. The line is leased by the UP. No traffic has been handled over the branch since 1951.

READING.—To abandon 1,913 feet of its Mount Carbon branch in Schuylkill county, Pa.

SOUTHERN-ATLANTIC COAST LINE.—To abandon the 568-foot interchange track between their lines at Woodbury, Ga. Other interchange facilities between the two carriers are at Warm Springs, a few miles from Woodbury.

TRANS FLORIDA CENTRAL.—To abandon its entire line, approximately 15.7 miles, extending from Sebastian, Fla., to Broadmoor. The line has sustained substantial losses during the last five years, Division 4 said.

WESTERN MARYLAND.—To abandon its Kempton branch, from Kempton Junction, W. Va., to the end of the line at Kempton, 2.6 miles.

WYOMING RAILWAY.—To abandon its entire line, approximately 28.6 miles, extending from Buffalo, Wyo., to Clearmont. This affirms a previous I.C.C. decision which was postponed pending further hearings. Persons protesting the abandonment dropped their plan to reorganize and refinance the line for continued operation (*Railway Age*, April 7, page 136).

CAR SERVICE

I.C.C. Service Order No. 891, effective from October 8 until December 31 unless otherwise modified, authorizes the use of Southern Pacific stock cars (series 70300-77775) for loading fruit and vegetable containers and box shooks from origins in Washington, Oregon and California, to destinations in those same states and in Nevada and Arizona, on the basis of two stock cars for each box car ordered—subject to the carload minimum weight which would have applied if the shipment had been loaded in a box car.

FINANCIAL

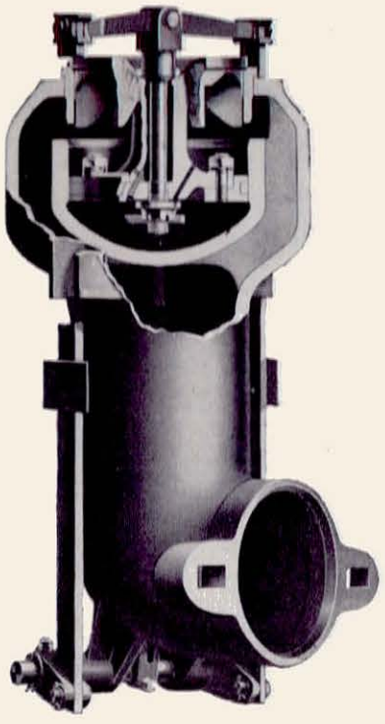
Alleghany Corporation.—*Debentures.*—Final terms of the exchange offer to be made to holders of Alleghany's series A preferred stock (*Railway Age*, September 22, page 68), are as follows: In exchange for each series A preferred share the corporation will offer $100 principal amount of 10-year 5 per cent debentures, which will have a sinking fund to retire 10 per cent of the debentures each year, and warrants, good in perpetuity, to purchase 20 Alleghany common shares for $3.75 each.

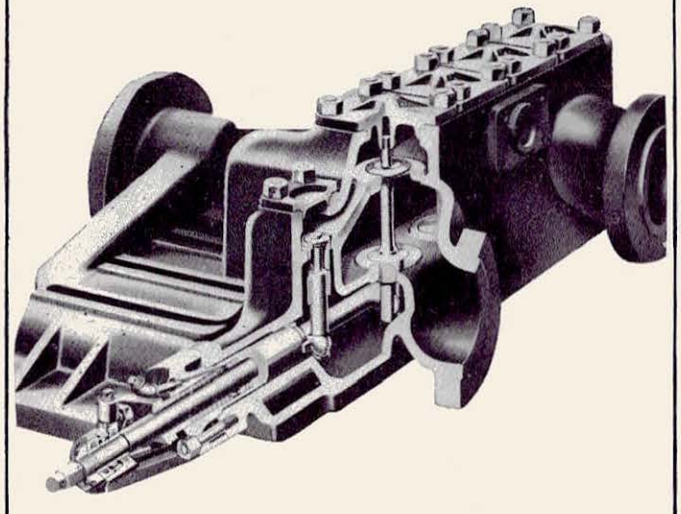
Boston Terminal Company.—*Reorganization.*—The New York, New Haven & Hartford, the New York Central and a new terminal company, the Boston Terminal Corporation, have applied to the I.C.C. for authority to issue securities, assume financial obligations, and transfer property, thereby placing into effect the plan of reorganization for the BTC. The new terminal corporation, organized in May, would issue 10 shares of no par stock, seven to the New Haven and three to the NYC. In addition, a $3,500,000 note, secured by

Dependable Throttle Operation

Steam locomotive throttle parts should be as dependable as those they replace...possible only when obtained from the manufacturer who designed and built the original equipment.

Progressively improved designs, special alloys and fine tolerances have been responsible for excellent throttle performance. Therefore, for safe and dependable operation, order your





replacement parts for "American" and "Bradford" throttles from this company.

Similar foresight should also be exercised in the correct maintenance of steam locomotive equipment listed below... genuine replacement parts are also available for those devices.

THE
SUPERHEATER CO., INC.
Division of
COMBUSTION ENGINEERING-SUPERHEATER, INC.
200 Madison Ave., NEW YORK 16
Bankers Building, CHICAGO 3
Montreal, Canada, THE SUPERHEATER COMPANY, Ltd.

Superheaters · Pyrometers · Injectors · Steam Driers · Feedwater Heaters · Steam Generators · Oil Separators · American Throttles · Welded Boilers

a mortgage on the terminal property, would be issued and sold by competitive bidding. Proceeds from this note would be applied toward paying claims of bondholders of the old terminal company. Other valid claims against the old company would be paid by the New Haven and NYC on a 70-30 basis. The new terminal corporation would acquire all the old company's property, including South Station in Boston.

The New Haven and NYC would use the Boston terminal jointly. A separate application filed with the commission seeks authority for the New Haven and NYC to acquire control of the new corporation, and asks approval of an agreement covering joint use of the terminal facilities.

Chicago, Rock Island & Pacific.—*Control of Peoria & Bureau Valley.*—The I.C.C.'s Division 4 has authorized this road to acquire all outstanding stock of the P&BV. The Rock Island already owns 10,411 of the 15,000 shares outstanding and operates the P&BV under perpetual lease. The present order supplements a June 1952 ruling in which the commission authorized the Rock Island to acquire another 2,000 shares of P&BV stock. (*Railway Age*, June 23, page 90).

Colorado & Southern.—*Bond Redemption.* — All outstanding general mortgage 4½ per cent series A gold bonds will be redeemed by the C&S on November 1. The bonds will be redeemed at face value plus interest to redemption date.

Conemaugh & Black Lick. — *Stock Dividend.*—Division 4 of the I.C.C. has authorized this road to issue 5,000 shares of $100 par stock as a stock dividend. The road is a subsidiary of Bethlehem Steel Company, which owns all presently outstanding stock. The stock dividend of $500,000 is designed "to more nearly equalize capitalization and investment," the road said (*Railway Age*, August 11, page 16).

Greenville & Northern.—*Acquisition.*—Division 4 of the I.C.C. has authorized this road to acquire control of its own parent company, the Saluda Land & Lumber Co. The road will issue 10,095 of $5 par common stock, which will be delivered to the lumber company in exchange for all the latter's assets. Among these assets are 10,000 shares of G&N stock as well as G&N indebtedness amounting to $493,238. The lumber company will distribute the new railroad shares among its own stockholders in exchange for their lumber company shares, and the Saluda company will then be dissolved. This "plan of reorganization" for the lumber company will result in cancellation of all G&N long-term debt and elimination of fixed charges.

Illinois Central.—*Bond Issues to Be Paid.*—Immediate payment has been arranged for four bond issues recently called for redemption on December 1, plus two more issues that would mature in 1953. Holders of joint first refunding mortgage Series A and B 5 per cent, Series C 4½ per cent and Series D 4 per cent bonds, due December 1, 1963, have been directed to present their bonds to the trustee, the City Bank Farmers Trust Company, New York, for payment. Holders of Louisville division and terminal bonds due July 1, 1953, and IC 4 per cent bonds due November 1, 1953, will receive payment of principal, plus interest to maturity date, from the United States Trust Company, New York. Retirement of these issues was made possible by recent issuance of $62 million of consolidated mortgage 30-year bonds (*Railway Age*, September 22, page 68).

Lehigh & New England.—*Trackage Rights.*—The I.C.C. has set aside its January 14, 1946, order authorizing this road to acquire trackage rights over 4 miles of the Central of New Jersey between Hauto, Pa., and Nesquehoning (*Railway Age*, January 26, 1946, page 257). The L&NE advised the commission that the authority granted has never been used.

Long Island. — *Reorganization.* — William Wyer, trustee of this bankrupt road, has denied that he in any way urged the Interstate Commerce Commission to delay hearings on reorganization plans proposed for the LI. In a formal statement answering recent charges made by the Long Island Transit Authority, he also denied he is benefitting financially from the employment of his firm, Wm. Wyer & Co., as a consulting organization on a number of technical studies being made for the road. Mr. Wyer said he actually would gain more financially if his firm were not employed by the LI, because he does not share in any income from the project but would share in revenue if the firm were working elsewhere.

Port Angeles Western (Sol Duc Investment Company).—*Reorganization.*—The I.C.C. has approved payment of $3,000 to Justin Martin, temporary receiver, for the period from March 24, 1952, to August 21, and $2,000 to Willard J. Wright, his counsel, for the period from March 26 to August 15.

Savannah Union Station.—*Joint Use.*—Division 4 of the I.C.C. has approved a new agreement covering joint use of Savannah, Ga., union station facilities by the Atlantic Coast Line, the Southern, and the Seaboard Air Line (*Railway Age*, June 9, page 73). The new agreement continues in effect an arrangement dating from 1902. Rental payments are prorated on a user basis. Under this, the ACL paid 56.75 per cent in 1951, the SAL paid 38.73 per cent, and the Southern, 4.52 per cent.

Staten Island Rapid Transit.—*Branch Sale Proposed.*—Purchase by New York City of this Baltimore & Ohio subsidiary's Tottenville branch for $1 has been recommended by a special committee appointed by Mayor Vincent Impellitteri shortly after the road asked the state's Public Service Commission for authority to abandon passenger operations entirely (*Railway Age*, August 11, page 58, and June 9, page 15).

The committee also recommended that the road's two other branches—the North Shore and South Beach—be permitted to abandon passenger operations. The 14-mile Tottenville branch would be operated by the road as agent for the city, which would discontinue all competing bus service and use feeder buses to the road's stations. In return for use of the road's equipment, personnel, servicing and maintenance, the road would receive five cents for each passenger carried.

Table of Selected Income and Balance Sheet Items of Class I Steam Railways for the month of June and six months of 1952 appears on page 162.

New Securities

Application has been filed with the I.C.C. by:

CENTRAL OF GEORGIA.—To assume liability for $2,775,000 of series X equipment trust certificates, to finance in part 24 diesel locomotive units and 50 freight cars costing an estimated $3,474,985:

	Description and Builder	Estimated Unit Cost
9	1,600-hp. road-switchers (American Locomotive-General Electric Companies)	$151,494
3	1,600-hp. road-switchers (Alco-G.E.)	161,606
4	1,200-hp. switching locomotives (Electro-Motive Division, General Motors Corporation)	105,729
4	1,200-hp. switching locomotives (Baldwin-Lima-Hamilton Corporation)	105,112
4	1,200-hp. switching locomotives (Fairbanks-Morse & Co.)	105,147
50	70-ton covered hopper cars (Pullman-Standard Car Manufacturing Company)	7,255

The certificates, to be dated November 1, would mature in 15 annual installments of $185,000 each, beginning November 1, 1953. They would be sold by competitive bidding, with interest rate to be set by such bids.

CHESAPEAKE WESTERN.—To issue notes totaling $125,000 to the First National Bank, Harrisonburg, Va., proceeds from which would be used to refund existing obligations and debts and to restore working capital. Since 1946 the road has purchased three diesel locomotives and constructed seven warehouses on its line. A part of the existing obligations represents unpaid balance on these items. The promissory notes would bear interest at 4½ per cent.

MAINE CENTRAL.—To issue and sell $1,500,000 of first mortgage divisional lien 5 per cent bonds, proceeds from which would be used to refund first mortgage gold bonds of the Portland & Ogdensburg, due November 1, 1953. The P&O is now part of the MC, and the new divisional lien bonds would be issued against that property. The new bonds would be dated as of September 1, 1952, and would mature September 1, 1977. The I.C.C. already has exempted sale of this issue from competitive bidding requirements (*Railway Age*, October 6, page 131). The P&O bonds, which bear interest at 4½ per cent, are outstanding in the amount of $1,570,000.

PECOS VALLEY SOUTHERN.—To issue a $100,000, five per cent note to the First National Bank, Houston, Tex., proceeds from which would help finance general rehabilitation of a 10-mile segment of the PVS. The road told the I.C.C. in its application that the area it serves has undergone "unprecedented agricultural development" since 1947.

TENNESSEE CENTRAL.—To assume liability for $980,000 of series H equipment trust notes, to finance in part 200 hopper cars costing an estimated $4,900 each. The cars will be constructed

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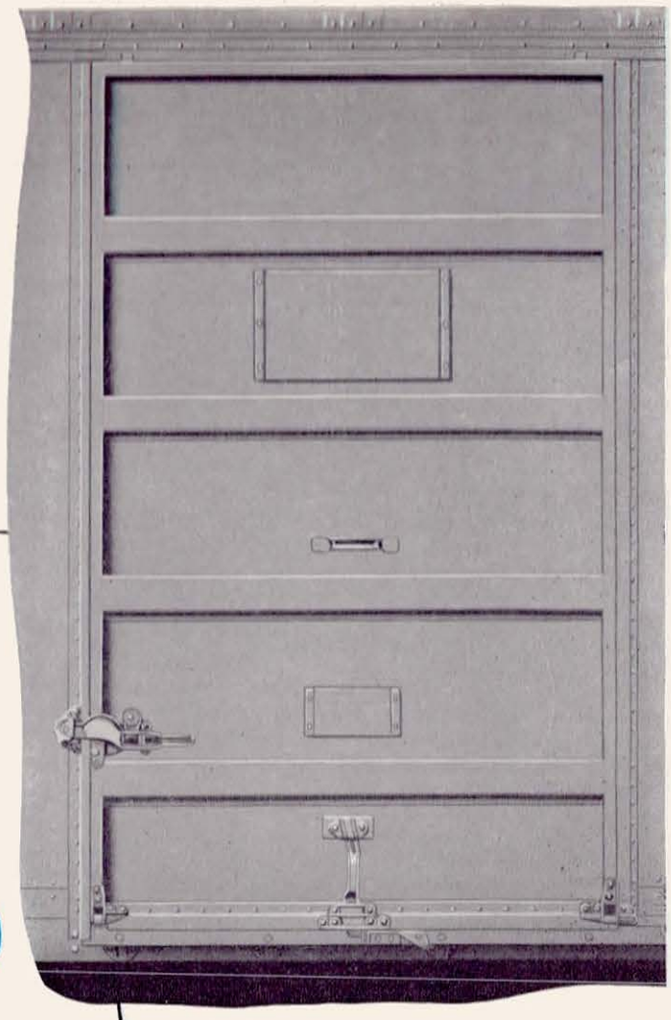

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by the Pullman-Standard Car Manufacturing Company. The notes, dated February 1, 1953, would mature in 30 semiannual installments of $3,000 each, beginning August 1, 1953. They would bear interest at 4 per cent. The road said it has obtained clearance from the Defense Transport Administration, and that the Reconstruction Finance Corporation will purchase the notes.

Security Price Averages

	Oct. 7	Prev. Week	Last Year
Average price of 20 representative railway stocks	62.64	62.95	57.35
Average price of 20 representative railway bonds	92.49	92.66	93.46

RAILWAY OFFICERS

EXECUTIVE

H. P. Hannan has been appointed transportation assistant to vice-president of the NEW YORK CENTRAL SYSTEM at Chicago, succeeding **Edward J. Molyneaux,** who has retired, under the company's pension system, after 48 years of service.

FINANCIAL, LEGAL & ACCOUNTING

As reported in *Railway Age* September 8, **Sidney P. Chockley** has been appointed treasurer of the NORFOLK & WESTERN at Roanoke, Va. Mr. Chockley was born at Johnson City, Tenn., and entered the service of the N & W on August 9, 1905, as a messenger in the Roanoke shops. He transferred to the treasurer's office in May, 1908 and was advanced to clerk four months later, becoming secretary to the treasurer in February 1931 and chief clerk in October 1937. Mr. Chockley was appointed assistant treasurer on December 1, 1938, which position he held until his recent promotion.

Sidney P. Chockley

H. R. Osmond has been appointed special counsel of the CHICAGO & EASTERN ILLINOIS. A graduate of the National University Law School, Washington, D.C., Mr. Osmond most recently served as assistant general counsel for the Defense Transport Administration. Prior to that he held the position of consultant to the chief of the civil transportation section at the general headquarters of the supreme commander of the Allied Powers in Tokyo, Japan. He has served in a number of capacities with the Interstate Commerce Commission and also as assistant general counsel for the Office of Defense Transportation.

T. F. Boyce has been appointed assistant comptroller of the KANSAS CITY SOUTHERN at Kansas City, Mo., succeeding **G. H. Bacon,** who has retired after 44 years of service.

Mr. Boyce entered railway service in 1909 with the Chicago Great Western as a yard clerk. After five years of service with that company he entered the accounting department of the KCS in February 1914. He had been chief clerk in the comptroller's office at Kansas City since 1939.

Mr. Bacon entered railroad contracting work at Kansas City in 1902. Three years later he went to Muskogee, Okla., as assistant auditor for the Missouri, Oklahoma & Gulf (now part of the Kansas, Oklahoma and Gulf). He also acted as purchasing agent and car accountant. He returned to Kansas City in 1908 and joined the KCS as a traveling auditor. Later he became chief

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clerk in his department. In 1913 he was appointed freight and passenger accountant. He was assistant auditor from July 1918, until May 1924, when his title was changed to assistant comptroller.

As reported in *Railway Age* October 6, **Gregory S. Prince** has been named general solicitor of the ASSOCIATION OF AMERICAN RAILROADS at Washington, D. C. Mr. Prince was born at Mobile, Ala., in 1910 and was graduated from Yale University Law School in 1934. He joined the legal staff of the A.A.R. in that year as an attorney. During World War II he served from 1942 to

Gregory S. Prince

1946 in the Army Service Forces at Washington, in South America and in Europe; he is now a lieutenant colonel in the Military Railway Service reserves. In 1946 Mr. Prince was appointed assistant general solicitor of the A.A.R. and four years later was advanced to assistant general counsel, which position he held until his recent appointment.

Louis J. Masson, assistant general auditor of the SOUTHERN PACIFIC at San Francisco, has retired after 50 years of service with the company.

G. C. Reveille, general auditor of the NORFOLK SOUTHERN, has been elected comptroller, with headquarters as before at Norfolk, Va. **E. Elwood McClure** has been elected assistant comptroller at Baltimore, Md. **C. C. Spencer,** auditor, has been elected general auditor, with headquarters as before at Norfolk. **Henry Oetjen** has been elected assistant secretary at New York, and **Miss Goldie M. Lane** has been elected assistant secretary at New folk. **N. A. Bloxsom,** acting assistant treasurer at Norfolk, has been elected assistant treasurer there.

Mr. Spencer was born on July 15, 1892, at South Mills, N.C., and entered railroad service in November 1910 with the Seaboard Air Line, working in the car record department until July 1917. He joined the NS on August 2, 1920, and served as clerk and chief clerk in the accounting department until August 1, 1942, when he was appointed auditor.

William M. Mooney, auditor of passenger receipts and station accounts of the TEXAS & PACIFIC at Dallas, Tex., has retired. **J. R. Tedford,** auditor of freight revenues, has been appointed to the newly created position of auditor of revenues; **J. W. Chick,** assistant auditor of freight revenues, has been appointed assistant auditor of revenues—a new position; **W. B. Moseley,** chief clerk to auditor of passenger receipts, has similarly been appointed assistant auditor of revenues; **R. E. Hardwick,** auditor of disbursements, has been appointed auditor of expenditures; and **W. A. Godfrey,** auditor of capital expenditures, has also been named auditor of expenditures.

Mr. Mooney came to the T&P in 1910 as a clerk in the passenger accounting office. Prior to that time he had served in minor capacities with the International-Great Northern at Palestine, Tex. He remained in accounting work at the T&P's Dallas headquarters continually until his retirement, serving as auditor of passenger receipts since 1932 and auditor of passenger receipts and station accounts since 1945.

Mr. Tedford came to the T&P in 1918. He has been employed in numerous capacities in the accounting department—all of them at Dallas.

A. D. Fleming has been transferred as assistant freight claim agent of the ATCHISON, TOPEKA & SANTA FE to Topeka, Kan. He succeeds **F. A. Rankin,** retired. **C. T. Dodge** has been appointed assistant freight claim agent at Chicago to succeed Mr. Fleming.

J. W. Ebert, general auditor of the WABASH at St. Louis, has been appointed comptroller to succeed **Henry A. Fett,** who has retired at his own request. **F. O. Marshall,** assistant comptroller of the Wabash has been appointed also assistant comptroller of the ANN ARBOR.

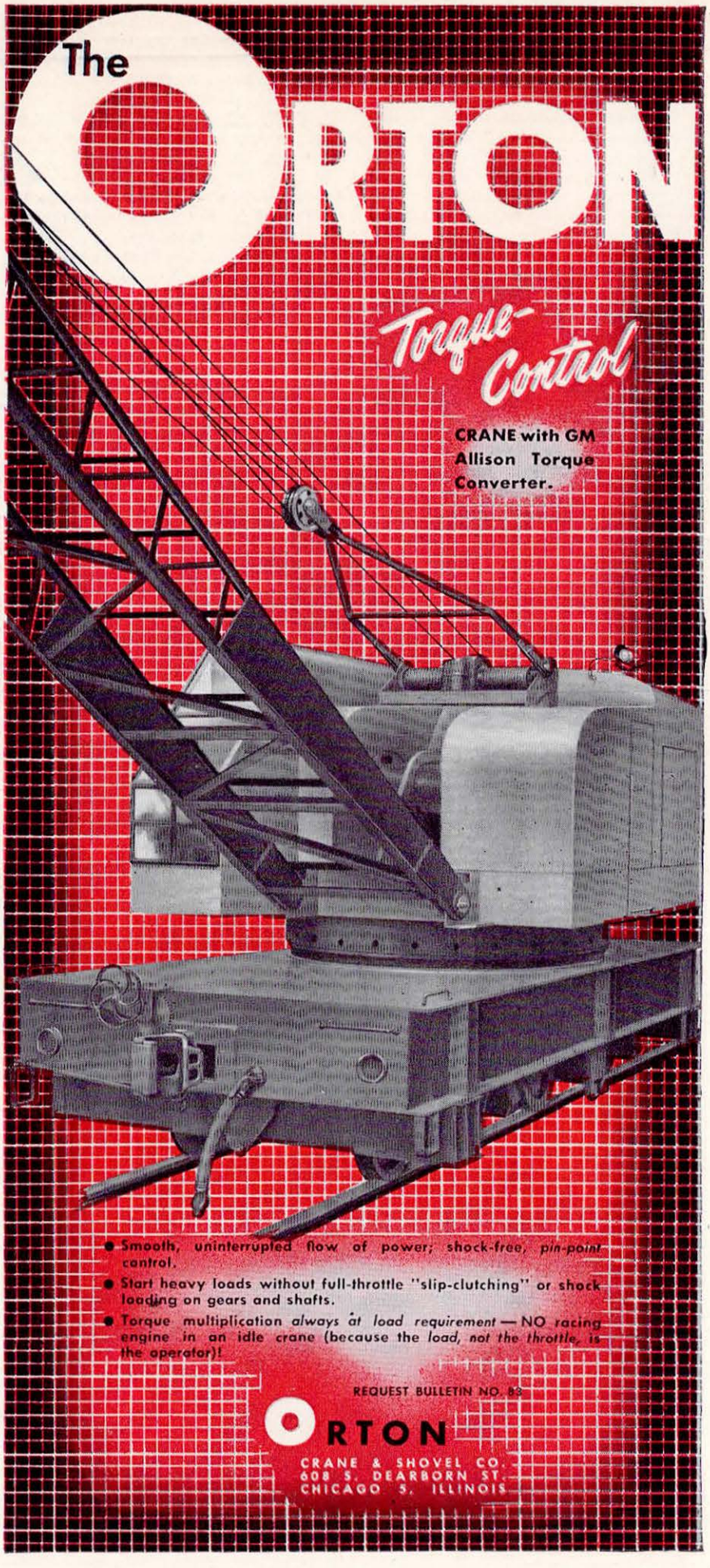
OPERATING

L. T. Riggs has been appointed supervisor of passenger service of the MISSOURI PACIFIC at St. Louis. He succeeds **R. F. McCaslin,** who has retired after 49 years of service.

T. C. McConnell has been appointed assistant to superintendent of transportation of the KANSAS CITY SOUTHERN at Shreveport, La.

R. D. Bedgood has been appointed rules examiner, and supervisor of safety and fire prevention, of the CHICAGO GREAT WESTERN, with headquarters at Oelwein, Iowa.

J. C. Houston, assistant superintendent freight transportation of the NEW YORK CENTRAL, has been appointed superintendent of freight transportation, Lines West district, with headquarters as before at Cleveland. **D. B. Ingold,** trainmaster at Toledo, has been appointed assistant superintendent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of freight transportation, Line West district, at Cleveland. **E. R. McGowin** has been named trainmaster of of the Toledo division at Toledo.

Kenneth Copeman, superintendent of the Atlantic division of the CANADIAN PACIFIC EXPRESS COMPANY, at Montreal, has retired. **G. E. Begley** has been named acting superintendent, to succeed Mr. Copeman. **J. W. C. Levy,** chief clerk, has been appointed assistant to superintendent of the Atlantic division. Mr. Copeman joined the express company in 1908 in his native Quebec and subsequently served as agent at Halifax, N.S., Quebec and Ottawa. He was appointed assistant superintendent at Montreal in 1946 and superintendent in 1949.

C. W. Graves has been appointed trainmaster of the MISSOURI PACIFIC's Wichita division, at Wichita, Kan., succeeding **J. S. Simon,** promoted. **E. J. Drimmel** has been transferred to Van Buren, Ark., as trainmaster of the Central division, succeeding Mr. Graves; **C. R. Dodson** has been transferred to Jefferson City, Mo., to succeed Mr. Drimmel as trainmaster on the Eastern division, and **R. Hickman** has been appointed trainmaster at Hoisington, Kan., succeeding Mr. Dodson. **H. A. Hopkins** has been appointed acting trainmaster at Council Grove, Kan., succeeding **C. A. Richter,** who has been granted sick leave. **R. B. Merriman** has been appointed trainmaster at Atchison, Kan., to succeed Mr. Hopkins. **W. A. Learmont** has been appointed trainmaster, St. Louis Terminal division, succeeding the late **J. L. Teckenbrock.**

As *Railway Age* reported on September 15, **James B. Clark** has been appointed superintendent of the Louisville division of the LOUISVILLE & NASHVILLE. Mr. Clark entered the service of the L&N in 1937 as a draftsman, subsequently advancing through a number of positions to assistant division engineer at Birmingham in 1945. Two years later he was promoted to division engineer, and in July 1950 was further advanced to assistant to general manager at Louisville.

James B. Clark

TRAFFIC

Robert J. Hurst, assistant traffic manager of the ELGIN, JOLIET & EASTERN at Chicago, has been appointed traffic manager, succeeding **William F. Hummel,** whose election as vice-president—traffic was reported in *Railway Age* October 6.

Clifford F. Forcell, commercial agent of the CHESAPEAKE & OHIO at Chicago, has been appointed general agent at New Orleans, succeeding **E. W. Lambert,** who has retired.

John Allan has been appointed general agent of the NORTHERN PACIFIC at Winnipeg, succeeding **Thomas J. O'Donnell,** who has retired.

J. R. Downey, general agent of the MINNEAPOLIS & ST. LOUIS, has been appointed special representative. **C. W. Newland,** asistant general agent, has been named general agent. Both men continue to have headquarters at Detroit.

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MECHANICAL

R. T. Williams, locomotive foreman of the CANADIAN NATIONAL at Truro, N.S., has been appointed assistant superintendent motive power and car equipment of the Newfoundland district at St. John's, Nfld. Mr. Williams was born at Tooting, England, and entered the service of the CNR as a machinist apprentice at Moncton, N.B., in March 1924. He became a machinist at St. John in March 1934, assistant foreman in November 1943, assistant locomotive foreman at Halifax, N.S., in December 1944, and locomotive foreman at Truro in July 1946.

R. M. Veenis, locomotive mechanical engineer of the CANADIAN NATIONAL at Montreal, has been appointed mechanical engineer of the Central region at Toronto. **K. W. Thompson,** mechanical inspector at Montreal, succeeds Mr. Veenis as locomotive mechanical engineer. Mr. Veenis was born at Sudbury, Ont., and joined the CN in 1938 as a machinist apprentice. After war service he studied for a mechanical engineering degree at the University of Toronto while working during the summers as a machinist apprentice. Shortly after graduation, he was appointed superintendent of stationary steam plants at Toronto and in 1950 he became mechanical engineer at Montreal. Six months ago he was appointed locomotive mechanical engineer for the system.

Mr. Thompson joined the CN at Toronto in 1930. After serving as a machinist apprentice at Toronto and Stratford, Ont., he became a machinist in 1939. He served successively as inspector of motive power and car equipment at Toronto, assistant foreman in the motive power department at Stratford, and locomotive foreman at London, Ont., before his appointment as mechanical inspector last year.

Henry G. Burnham, engineer of tests of the NORTHERN PACIFIC at St. Paul, has retired after 40 years of service. He has been succeeded by **H. Bruce Hoesly,** assistant engineer of tests.

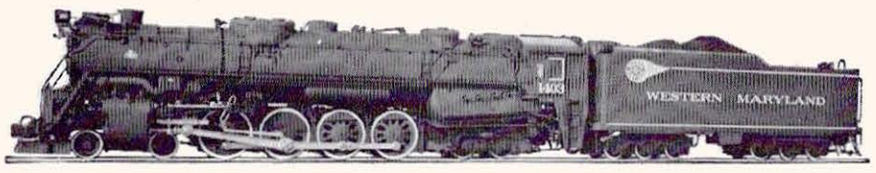
E. J. Carter, office manager in the office of general superintendent of motive power of the SOUTHERN PACIFIC, at San Francisco, has been appointed assistant to general superintendent of motive power at that point. **W. R. O'Neill** has been appointed to suceed Mr. Carter.

PURCHASES & STORES

F. J. Zaloudek has been appointed division storekeeper of the ELGIN, JOLIET & EASTERN, at Gary, Ind. Mr. Zaloudek was formerly chief clerk of the stores department at that point.

F. E. Foran has been named acting tie and lumber agent of the CANADIAN PACIFIC's Prairie and Pacific regions, at Winnipeg. He succeeds **D. H. Fen-**

CUT locomotive maintenance COSTS



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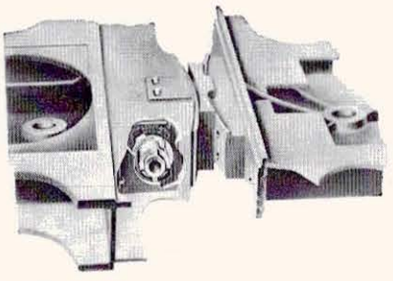
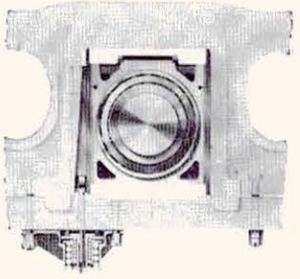


The Franklin E-2 radial buffer reduces maintenance by dampening and absorbing horizontal shake and vertical vibration. This results in less wear on chafing plates, drawbars and pins; fewer pipe failures; less displaced brickwork; and fewer loose cabs. It requires minimum attention and will make any locomotive, at any speed, a better riding engine. Crews appreciate the greater comfort it brings.

The Franklin Compensator and Snubber—Equally important with roller-bearing or surface-bearing locomotives, the Franklin Compensator and Snubber keeps the driving box or housing snug in the pedestal jaw, regardless of expansion or wear. It will absorb unusual thrusts and shocks. Driving box pound is eliminated. Wear and the possibility of failure of crank pins and rod bearings are minimized. Tire mileage is extended by reduction of quarter slip.



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wick, who has been promoted to assistant general tie and lumber agent at Montreal.

ENGINEERING AND SIGNALING

As reported in *Railway Age* October 6, page 139, **Richard A. Ullery** has been appointed assistant to chief engineer of the BESSEMER & LAKE ERIE at Greenville, Pa. Mr. Ullery was born on November 28, 1905, at Pittsburgh and was graduated from Lehigh University (C.E. 1928). He entered railroad service with the Pennsylvania in June 1928 as assistant on an engineer corps on the Central region and subsequently served as assistant track supervisor on the Buffalo and Eastern divisions. From June 1933 to May 1941 Mr. Ullery was engaged in private business. He joined the B&LE on the latter date as draftsman at Greenville and was appointed assistant track supervisor in February 1943, assistant engineer in July 1945, designing engineer in December 1948 and chief draftsman in March 1952.

As reported in *Railway Age* September 8, **G. R. Doull** has been appointed assistant chief engineer of the Atlantic region of the CANADIAN NATIONAL at Moncton, N.B. Mr. Doull was born at New Glasgow, N.S., on January 26, 1892, and began his career as a draftsman with the Maritime Bridge Company at New Glasgow in 1908. Four years later he joined the Nova Scotia Car Works in a similar capacity and in 1914 he became draftsman for the Department of Railways & Canals at Halifax. Mr. Doull entered the service of the Canadian Government Railways (now CNR) in 1916 as draftsman, and was appointed assistant engineer at Moncton in 1918. He became assistant engineer of the CNR at Toronto in 1921, transferring to Montreal in 1924. Mr. Doull was named bridge engineer of the Atlantic region at Moncton in 1944 and was promoted to principal assistant engineer of that region in November 1949.

G. R. Doull

Charles E. Sloan, engineer of bridges of the BALTIMORE & OHIO, has been appointed engineer of bridges and buildings, with headquarters as before at Baltimore. In this capacity Mr. Sloan will take over the duties of **Leland P. Kimball,** engineer of buildings, whose retirement was noted in *Railway Age* October 6, page 141. **Otis G. Wilbur,** assistant engineer of buildings, and **Abram Clark,** bridge designing engineer, have been promoted to assistant engineers of bridges and buildings. **Gurney H. Dayett, Sr.,** assistant engineer of bridges, has been appointed assistant to the engineer of bridges and buildings.

Charles E. Sloan

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Garwood, New Jersey

Mr. Sloan was born at Lewisville, Ohio, on February 7, 1885, and received a degree of B.S. in C.E. from West Virginia University; a B.S. degree from Johns Hopkins University in 1937, and a degree in civil engineering (Professional) from West Virginia University in 1938. He entered the engineering department of the B&O in 1913, becoming assistant engineer of bridges in 1923 and engineer of bridges in 1940.

Mr. Wilbur was born at Baltimore and joined the engineering department of the B&O in 1911, after being graduated from Baltimore Polytechnic Institute. He became assistant engineer of buildings in 1948.

Mr. Clark was born at Gloversville, N. Y., and received a B.S. degree in civil engineering from Union College in 1921. Two years later he entered the engineering department of the B&O and in 1940 was appointed designing engineer in the bridge department.

OBITUARY

Charles E. Musser, 72, who retired in January 1948 as chief of personnel of the PENNSYLVANIA at Philadelphia, died on October 3 at his home in that city.

Wingate F. Cram, 74, chairman of the board of the BANGOR & AROOSTOOK at Bangor, Me., died in that city on October 4, after a brief illness. Mr. Cram was born at Bangor on December 4, 1877, and attended Harvard (A.B. 1900) and Columbia Law School. He entered railroad service on October 1, 1910, in the office of the president of the B&A, later becoming general assistant to president. On June 9, 1909, Mr. Cram was appointed clerk of the corporation and on November 1, 1917, he became treasurer. He was president of the B&A from April 21, 1936, to April 20, 1948, becoming chairman of the board on the latter date.

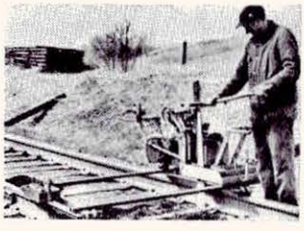
Wingate F. Cram

George LeBoutillier, 77, chairman of the board of the Harborside Warehouse Company of Jersey City and former vice-president of the PENNSYLVANIA and the LONG ISLAND, died on October 5 at his home in New York, after an intermittent illness. Mr. LeBoutillier was born at Cincinnati on February 2, 1876, and was graduated from the University of Cincinnati (C.E. 1895). During summer vacations of 1893 and 1894 he worked as a messenger for the Pittsburgh, Cincinnati, Chicago & St. Louis (part of the PRR system). He entered the permanent service of the PRR in August 1895 as a rodman. From 1900 to 1914 Mr. LeBoutillier was engaged in engineering work on several divisions and then served as superintendent of the Richmond, Logansport, Cleveland and Pittsburgh divisions, successively. On March 1, 1920, he was promoted to general superintendent of the Eastern Pennsylvania division at Harrisburg, and on January 18, 1923, he became vice-president of the LI at New York. In 1927 and 1928 he held the additional title of resident vice-president of the PRR at New York. His title was later changed to vice-president, New York Zone, which position he held until his retirement in 1946, upon reaching the age of 70. Mr. LeBoutillier then became president of the Harborside Warehouse Company, which operates one of the largest terminal and storage facilities in the New York port area, and on March 16, 1949, was elected chairman of the board of that organization.

Woolery salutes the

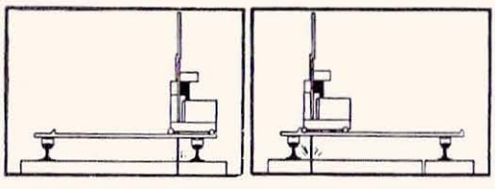
Rock Island

ON 100 YEARS OF CONSTANT PROGRESS

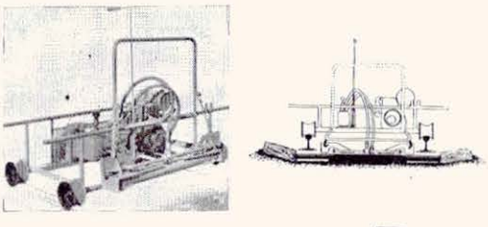


From hand labor to mechanization the WOOLERY team makes great savings in tie renewals!

The WOOLERY Tie Cutter provides a proven money-saving method of removing old ties without trenching, jacking up track, or adzing tops of rail-cut ties.



After tie has been cut on both sides, the operator of the NEW WOOLERY TIE END REMOVER removes center section in the usual manner with tie tongs and then moves the NEW WOOLERY TIE END REMOVER into position and drops the double-ended hydraulic cylinder into the tie-bed. A simple turn of the valve pushes the tie-end completely clear of the rail.



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Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

Air Brake Association.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill.

Allied Railway Supply Association.—C. F. Weil, P. O. Box 5522, Chicago 80, Ill.

American Association of Baggage Traffic Managers.—T. R. Stanton, acting secy.-treas., 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 9-11, 1953, Hotel Statler, Detroit, Mich.

American Association of Passenger Rate Men.—Paul Nordgren, Chicago, North Shore & Milwaukee, 105 W. Madison St., Chicago 2, Ill.

American Association of Passenger Traffic Officers. — B. D. Branch, Eastern Timetable Distributing Company, Liberty Street Terminal, New York 6, N. Y.

American Association of Railroad Superintendents.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill.

American Association of Traveling Passenger Agents.—C. A. Melin, P. O. Box 5025, Cleveland 1, Ohio.

American Railway Bridge and Building Association.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill.

American Railway Car Institute.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

American Railway Development Association. — P. R. Farlow, Illinois Central, 135 E. Eleventh Pl., Chicago 5, Ill. Annual meeting, April 20-22, 1953, Battle House Hotel, Mobile, Ala.

American Railway Engineering Association.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 17-19, 1953, Palmer House, Chicago, Ill.

American Railway Magazine Editors' Association.—T. J. Zirbes, Jr., Rock Island Lines News Digest, La Salle Street Station, Chicago 5, Ill.

American Short Line Railroad Association.—C. E. Huntley, 2000 Massachusetts Ave., N. W., Washington 6, D. C.

American Society for Testing Materials.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Spring meeting and committee week, March 2-6, 1953, Hotel Statler, Detroit, Mich. Annual meeting, June 29-July 3, 1953, Chalfonte-Haddon Hall, Atlantic City, N. J.

American Society of Mechanical Engineers.—C. E. Davies, 29 W. 39th St., New York 18, N. Y. Annual meeting, November 30-December 5, 1952, Hotel Statler, New York.

Railroad Division — E. L. Woodward, *Railway Mechanical and Electrical Engineer*, 79 W. Monroe St., Chicago 3, Ill.

American Wood-Preservers' Association.—W. A. Penrose, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 28-30, 1953, Hotel Cleveland, Cleveland, O.

Associated Traffic Clubs of America.—R. A. Ellison, Cincinnati Chamber of Commerce, 1203 Federal Reserve Bank Bldg., Cincinnati 2, O. Annual meeting, October 20-22, 1952, Hotel St. Paul, S. Paul, Minn.

Association of American Railroad Dining Car Officers.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, October 14-16, 1952, Palace Hotel, San Francisco, Cal.

Association of American Railroads.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenanance Department.—J. H. Aydelott, Vice-president, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 21-23, 1952, Edgewater Gulf Hotel, Edgewater Park, Miss

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meetings, October 20-22, 1952, Hotel Roosevelt, New Orleans, La.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Protective Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Safety Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section of the Engineering and Mechanical Divisions.—S. W. Marras, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 24-26, 1953, Atlantic City, N. J.

Engineering Division.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 17-19, 1953, Palmer House, Chicago, Ill.

(Continued on page 185)

Your worn fuel injection equipment made "good as new"

Our expert rebuilding service gives your equipment thorough inspection, salvage of usable parts, replacement of those beyond repair, testing after reassembly, and a permanent record of each piece of equipment, all at moderate cost.

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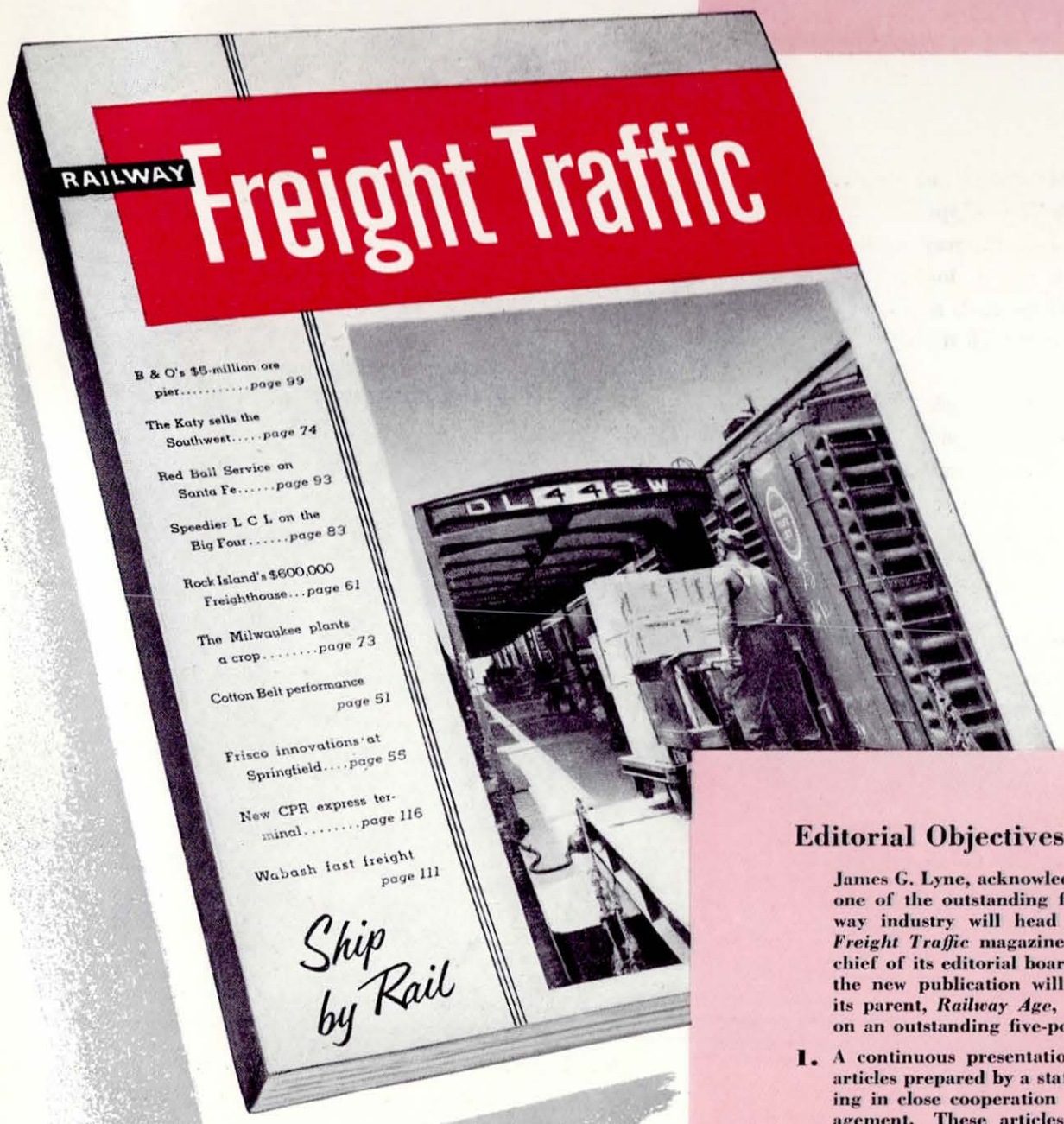
A NEW *monthly* MAGAZINE *for* SHIPPERS

Superseding Railway Age's Freight Traffic Issues

A SIMMONS-BOARDMAN PUBLICATION

The ONLY exclusively


RAILWAY Freight Traffic
B & O's $5-million ore pier.....page 99
The Katy sells the Southwest.....page 74
Red Ball Service on Santa Fe.....page 93
Speedier L C L on the Big Four.....page 83
Rock Island's $600,000 Freighthouse...page 61
The Milwaukee plants a crop.....page 73
Cotton Belt performance page 51
Frisco innovations at Springfield....page 55
New CPR express terminal.....page 116
Wabash fast freight page 111
Ship by Rail

Editorial Objectives:

James G. Lyne, acknowledged authority and one of the outstanding figures in the railway industry will head the new *Railway Freight Traffic* magazine as publisher and chief of its editorial board. The policies of the new publication will parallel those of its parent, *Railway Age*, and will be based on an outstanding five-point program:

1. A continuous presentation of Ship-by-Rail articles prepared by a staff of experts working in close cooperation with railway management. These articles will describe all types of efficient new railway facilities installed through railway investments of billions of dollars to provide shippers with better service.
2. A consistent editorial campaign for the private ownership and operation of the nation's railways.
3. Monthly summaries of interesting and informative railway news developments from the nation's capital plus continent-wide news about freight schedules and deliveries.
4. Pertinent and timely articles written expressly for *Railway Freight Traffic* magazine by prominent shippers.
5. The aggressive editorial promotion of a new National Transportation Policy with equality and fair play for all carriers.

national publication devoted to Railway Freight Traffic

1. **Representing an expanded service both for shippers and the railroads, the new Railway Freight Traffic magazine is a logical transition from *Railway Age's* monthly Freight Traffic Issues which it replaces.**

2. ***Railway Freight Traffic* will be distributed to leading shippers throughout United States and Canada, to keep them abreast of all new developments in railway freight service.**

3. **It will aggressively promote a continuing campaign of Ship-by-Rail, and help mold favorable public opinion among the railways' most important freight customers.**

4. **It will provide a medium in which individual railways can advertise their freight services as a basic part of an over-all publishing program concentrated wholly on promoting railway freight traffic.**

The purpose of changing the *Railway Age* Freight Traffic Issues into a separate publication is to broaden the scope of this service and increase its value both to the shippers who read it and to the railroads and suppliers who advertise in it. The new magazine will be a step forward in establishing a clear distinction between the editorial service rendered to shippers and the regular *Railway Age* service to the railway and railway supply industries.

The new monthly *Railway Freight Traffic* magazine will take over both the service and shipper distribution of the Freight Traffic issues of *Railway Age*. It will offer a new schedule of advertising rates commensurate with its concentrated distribution to shippers. These rates are available *in combination* with *Railway Age*, thus making available *both* audiences with outstanding economy.

The weekly *Railway Age* will continue to cover freight traffic developments and problems for its railway subscribers. It will continue to publish its annual Passenger Traffic Number (next issue May 18, 1953), with its special distribution to inter-line ticket agents.

Railway Age will continue to introduce new ideas for improving its service to the railroads and to advertisers. No effort will be spared to maintain its outstanding editorial leadership in service to the railways and the railway supply industry, which has kept it in front of railway progress for 96 years.

Let's look at the record

What shippers say—
about RAILWAY AGE'S FREIGHT TRAFFIC ISSUES

Here are a few samples from more than 3,500 enthusiastic letters and cards received from shippers in all sections of the United States and Canada. To help formulate plans for the new Freight Traffic magazine shippers were polled by the Research Department of Charles L. Rumrill & Co., Inc., Rochester, N.Y.

USS

"Railway Age is very interesting, you are to be commended upon the fine material gathered together for the Freight Traffic issues."

L. L. Adams,
Asst. to Vice President, Traffic

DITZLER COLOR DIVISION

"I think Railway Age is a very fine periodical and enjoy reading it from cover to cover.—The articles published in your magazine are positively excellent."

John H. La France,
Traffic and Warehouse Mgr.

Indiana State Chamber of Commerce

"I want to compliment you on the very constructive approach to public relations that is being made in the Freight Traffic issues of Railway Age."

Herschel A. Hollopeter,
Transportation Director

INTERNATIONAL MILLING

"The constructive and progressive suggestions from articles and advertisements in Railway Age are very beneficial to our traffic operation."

O. W. Fry,
Traffic Manager

Gaylord Boxes

"The new service of 12 Freight Traffic issues yearly is a real step forward and should receive hearty welcome among its many readers interested at all in transportation matters."

F. L. Ruland,
Asst. Gen'l. Traffic Manager

Birmingham Sash & Door

"I want to congratulate you on the very fine Freight Traffic program you are putting on."

J. F. Watson,
President

Glidden

"I find the Freight Traffic issues of Railway Age most interesting and helpful and believe that they extend to those interested in transportation a service which will be very favorably accepted."

F. R. Hysell,
General Traffic Manager

OTIS ELEVATOR

"I have appreciated Railway Age's Freight Traffic issues and would like to continue receiving them. Have picked up a number of informative ideas from these issues and believe there will be others of particular interest to me."

Harry R. Davis

BIRDS EYE

"Naturally, information received from such periodicals as the Railway Age keeps us more or less up-to-date on what is going on in the transportation field."

A. E. Huff, Manager,
Warehousing, Transportation

BERGER MANUFACTURING DIVISION

"We take this occasion to compliment you on the various articles carried in the Freight Traffic issues and I can say further that I have referred this to our top executives and assure you that it is quite a source of information and education."

H. D. Rhodehouse,
General Traffic Manager

Scott Paper

"We would encourage you to use all of the power at your command through specific articles aimed at finding adequate solutions to the problems that face us today, as well as the force of your editorial column. Our traffic department is finding your monthly Freight Traffic issues more interesting every month."

J. J. Inch,
Traffic Manager

SIMMONS-BOARDMAN PUBLICATIONS

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CHICAGO 3—79 W. MONROE STREET
CLEVELAND 13—TERMINAL TOWER

Meetings and Conventions

(Continued from page 180)

Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5, Ill.

Mechanical Division.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 22-26, 1953, Convention Hall, Atlantic City, N. J.

Purchases and Stores Division. John L. Timanus, Transportation Bldg., Washington 6, D. C. Annual meeting, June 22-26, 1953, Convention Hall, Atlantic City, N. J.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill.

Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department. — Arthur R. Seder, Vice-president, Transportation Bldg., Washington 6, D. C.

Accounting Division.—R. E. Keefer, Transportation Bldg., Washington 6, D. C. Annual meeting, June 2-4, 1953, Edgewater Beach Hotel, Chicago, Ill.

Treasury Division.—R. E. Keefer, Transportation Bldg., Washington 6, D. C.

Traffic Department.—Walter J. Kelly, Vice-president, Transportation Bldg., Washington 6, D. C.

Association of Interstate Commerce Commission Practitioners.—Miss Sarah F. McDonough, Executive Secretary, 2218 I.C.C. Building, Washington 25, D. C. Annual meeting, May 13-14, 1953, St. Francis Hotel, San Francisco, Cal.

Association of Railroad Advertising Managers. — C. D. Perrin, Asst. Secy., 85 West Harrison St., Chicago 5, Ill. Annual meeting, January 21-24, 1953, Greenbrier Hotel, White Sulphur Springs, W. Va.

Association of Railway Claim Agents.—F. L. Johnson, Gulf, Mobile & Ohio, 104 St. Francis St., Mobile 5, Ala. Annual meeting, May 20-22, 1953, Hotel Statler, Detroit, Mich.

Bridge and Building Supply Men's Association.—L. R. Gurley, Modern Railroads, 201 N. Wells St., Chicago 6, Ill.

Canadian Railway Club.—C. R. Crook, P.O. Box 162, Montreal 3, Que. Regular meeting, second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

Car Department Association of St. Louis.—D. W. Kramer, Relay Depot Mail Room, East St. Louis, Ill. Regular meetings fourth Tuesday of each month except June, July and August, Hotel DeSoto, St. Louis, Mo.

Car Department Officers' Association.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill.

Car Foremen's Association of Chicago.—W. H. LaMon, 1307 Maple Ave., Downers Grove, Ill. Regular meetings, second Monday of each month, except June, July and August, LaSalle Hotel, Chicago, Ill.

Central Railway Club of Buffalo.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

Eastern Association of Car Service Officers.—H. C. Rochester, Canadian National, 891 Notre Dame St., West, Montreal 3, Que. Annual meeting, November 13-14, 1952, St. Charles Hotel, New Orleans, La.

Eastern Car Foreman's Association. — W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February, March, April, May, October and November, 29 W. 39th St., New York, N. Y.

Locomotive Maintenance Officers' Association.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark.

Maintenance of Way Club of Chicago.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, which is third Monday, at Eitel's Restaurant, Field Bldg.

Master Boiler Makers' Association. — A. F. Stiglmeier, 29 Parkwood St., Albany 8, N. Y.

Metropolitan Maintenance of Way Club.—John S. Vreeland, Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in February, April, October and December. Next meeting, October 30, 1952, Hotel Shelburne, New York.

Military Railway Service Veterans. — Carl N. Rydin, 605 Railway Exchange, Chicago 4, Ill.

National Association of Railroad and Utilities Commissioners—Austin L. Roberts, Jr., 7413 New Post Office Bldg., Washington 4, D. C. Annual meeting November 10-13, 1952, Hotel Marion, Little Rock, Ark.

National Association of Shippers' Advisory Boards.—C. L. Denk, Jr., Fulton Bag & Cotton Mills, 170 Boulevard Elsas, S.E., Atlanta 3, Ga.

National Defense Transportation Association.—Miss Lois E. Casavant, 930 F St., N. W., Washington 4, D. C. Annual meeting, October 27-29, 1952, Hotel Statler, New York.

National Industrial Traffic League. — Edward F. Lacey, 909 Kass Bldg., Washington 5, D. C. Annual meeting November 20-21, 1952, Hotel Statler, New York.

National Railway Appliances Association.—J. B. Templeton, Templeton, Kenly & Co., 1020 S. Central Ave., Chicago 44, Ill. Lewis Thomas, Asst. Secy., 59 E. Van Buren St., Chicago 5, Ill.

National Safety Council, Railroad Section.—R. S. James, Denver & Rio Grande Western, Rio Grande Building, Denver 1, Colo. Annual meeting, October 21-23, 1952, Morrison Hotel, Chicago, Ill.

New England Railroad Club.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except May, June, July, August and September, Hotel Vendome, Boston, Mass.

New York Railroad Club.—C. T. Stansfield, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

Northwest Carmen's Association.—G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

Northwest Locomotive Association. — R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

Pacific Railway Club. — S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Sir Francis Drake Hotel, San Francisco, Cal., and Elks' Temple, Los Angeles, Cal.

Railroad Public Relations Association.—J. Don Parel, Association of American Railroads Transportation Bldg., Washington 6, D. C.

Railway Business Association.—P. H. Middleton, 38 S. Dearborn St., Chicago 3, Ill. Annual meeting November 21, 1952, Waldorf-Astoria, New York.

Railway Club of Pittsburgh.—G. E. Morrison, act. sec'y., 2710 Koppers Bldg., Pittsburgh 19, Pa. Regular meetings, fourth Thursday of each month, except June, July, August, September and December, Fort Pitt Hotel, Pittsburgh, Pa.

Railway Electric Supply Manufacturers' Association.—J. McC. Price, Allen-Bradley Company, 445-447 N. LaSalle St., Chicago 10, Ill.

Railroad Fuel and Traveling Engineers' Association.—L. H. Peters, New York Central, Room 1213, 139 W. Van Buren St., Chicago 5, Ill.

Railway Systems and Procedures Association. J. W. Milliken, *Railway Age*, 30 Church St., New York 7, N. Y. Next meeting, December 11-12, 1952, Palmer House, Chicago, Ill.

Railway Supply Manufacturers' Association. — A. W. Brown, 60 E. 42nd St., New York 17, N. Y. Exhibit in conjunction with meetings of the Mechanical Division and Purchases & Stores Division, A.A.R., June 22-27, 1952, Convention Hall, Atlantic City, N. J.

Railway Telegraph and Telephone Appliance Association. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

Railway Tie Association. — Roy M. Edmonds, 1221 Locust St., St. Louis 3, Mo. Annual meeting, October 22-24, 1952, Jung Hotel, New Orleans, La.

Roadmasters and Maintenance of Way Association.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill.

St. Louis Railroad Diesel Club.—F. C. Whitlock, Terminal Railroad Association of St. Louis, 376 Union Station, St. Louis 3, Mo. Regular meetings, second Tuesday of each month, Hotel York. Dinner, 6:45 P.M., meeting 8 P.M.

Signal Appliance Association. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

Southeastern Railway Diesel Club. — H. W. Brewer, Seaboard Air Line, Jacksonville, Fla. Regular meetings, second Tuesday in February, April, June, August, October and December, 9.30 a.m., Mayflower Hotel, Jacksonville, Fla.

Southern and Southwestern Railway Club. — A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

Southern Association of Car Service Officers.—F. I. Umhau, Southern Ry., Atlanta 3, Ga.

Toronto Railway Club.—J. A. North, P.O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July, and August, Royal York Hotel, Toronto, Ont.

Track Supply Association.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill.

Western Railway Club.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, Ill. Meetings scheduled for October 27, November 24, December 20, 1952, February 16, March 23, April 20, May 18, 1953, Hotel Sherman, Chicago, Ill.

Western Association of Railway Tax Commissioners.—M. L. Boydston, 516 W. Jackson Blvd., Chicago 6, Ill. Regular meetings, 12:15, first Wednesday of each month, except July and August, Traffic Club, Palmer House, Chicago, Ill.

"Good Traveling" for Another Century

The Rock Island Railroad has traveled far during the past 100 years . . . in sound, progressive growth and outstanding service to the people and industries of America. The Mall Tool Company is proud to salute this great railroad on the occasion of its Centennial Celebration . . . for a difficult job well done and a future bright with promise. Mall extends sincere good wishes for another century of "Good Traveling". It is a real privilege to have had some small share in the development and service of the Rock Island System by supplying essential Portable Power Tools for the most efficient maintenance of equipment and right-of-way.

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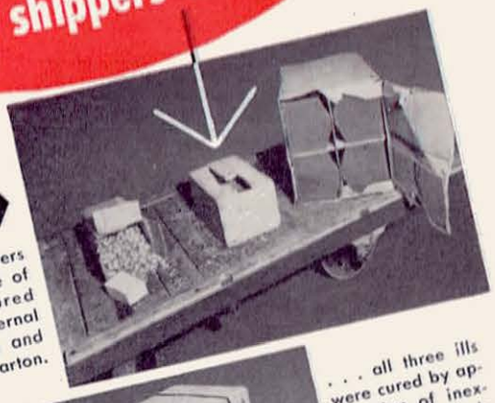
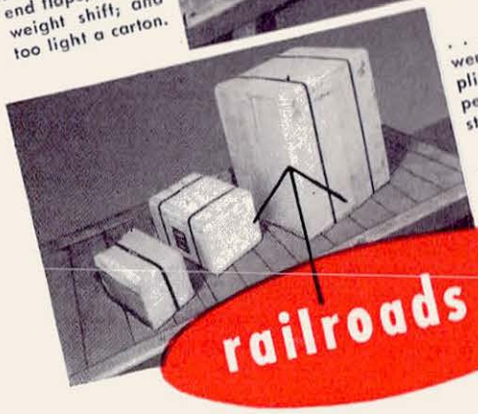
Mall

when shippers don't ...



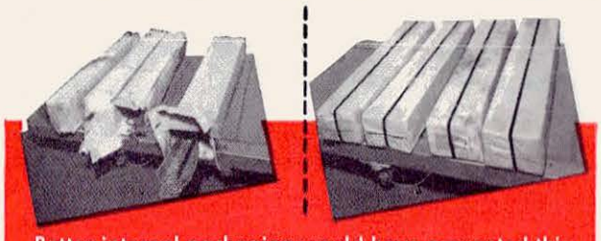
These containers failed because of poorly secured end flaps; internal weight shift; and too light a carton.



. . . all three ills were cured by application of inexpensive Signode steel strapping.

railroads do

...with Signode Steel Strapping!



Better internal packaging would have prevented this damage. The railroad recoopering crew had to hold up delivery to do what should have been done before—with Signode steel strapping.

Some shippers astonish even container manufacturers with the faith they put in their products. For example, the containers shown here were sent to market strapless. Results . . . embarrassing delays, a trip to the recoopering shop, and expensive freight damage claims.

In the railroad recoopering shop where these photos were taken, strapping methods are popular. There is a good reason. They are based on information about new and better tested and approved ways to protect shipments in transit passed on by Signode fieldmen.

Maybe your men missed the Signode fieldman the last time he was around. He'll be glad to call again. Just write to

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2637 N. Western Ave., Chicago 47, Ill.

Offices Coast to Coast

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this seal means security in shipping

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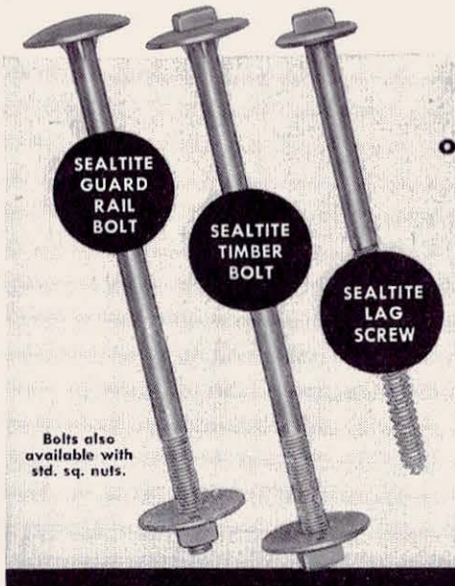

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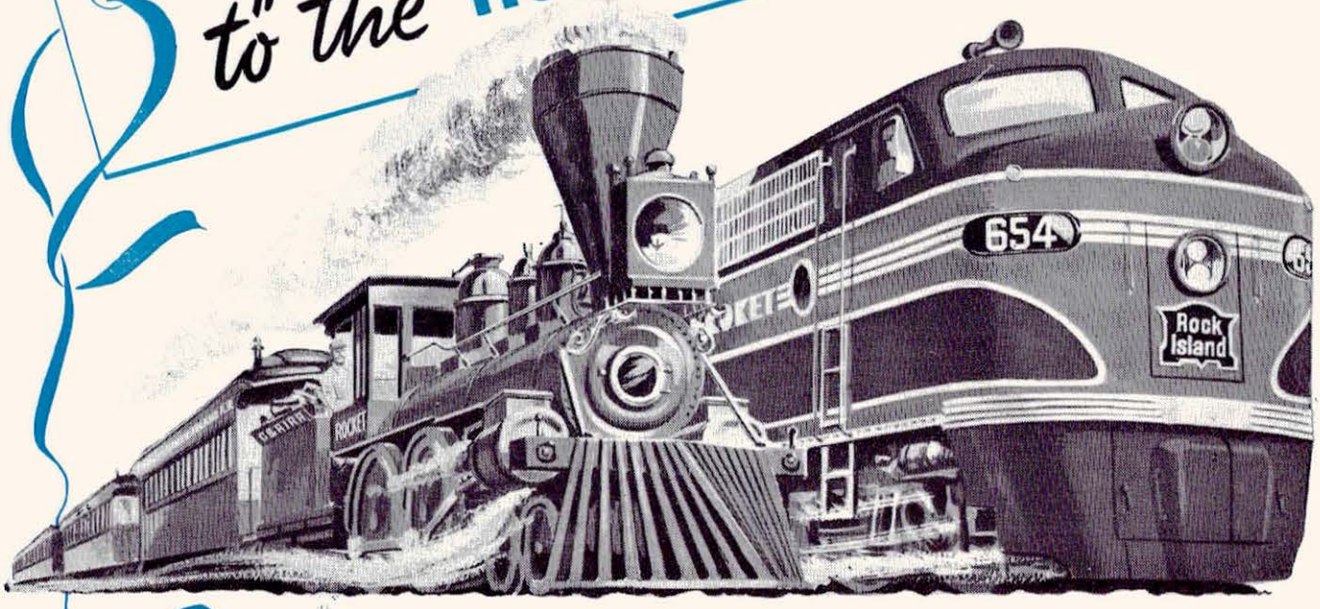

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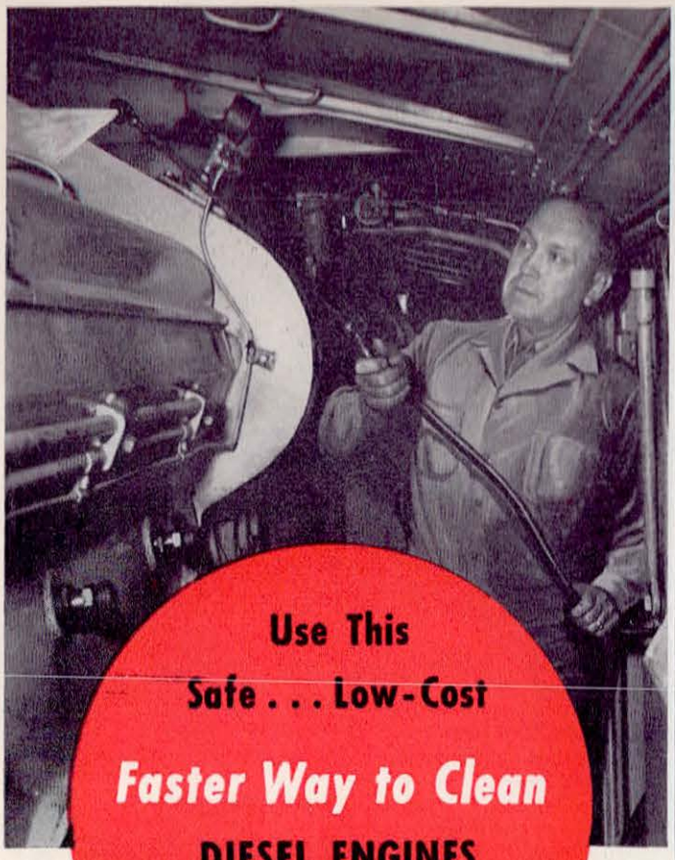

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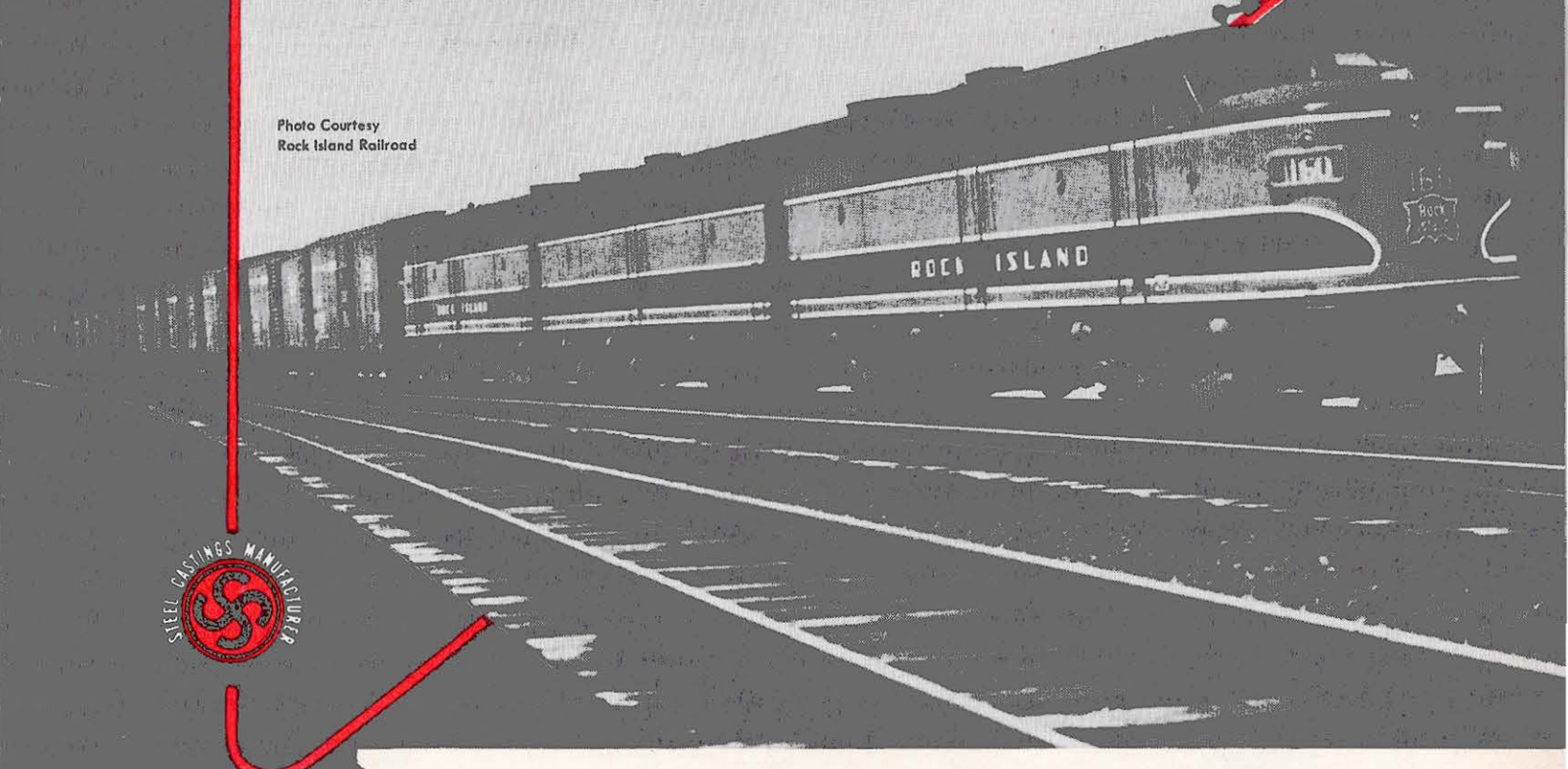
1852 - The Road of Planned Progress - 1952



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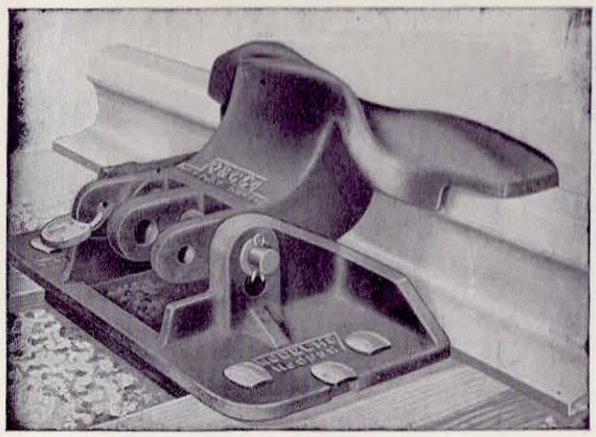

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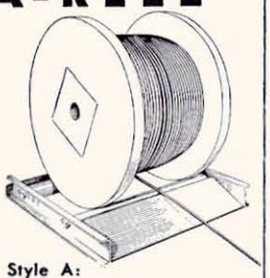

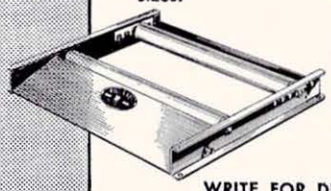

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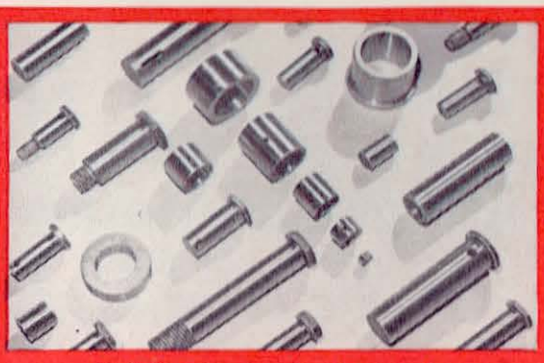

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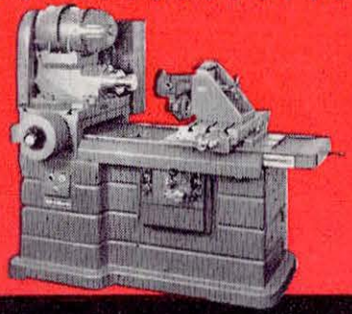

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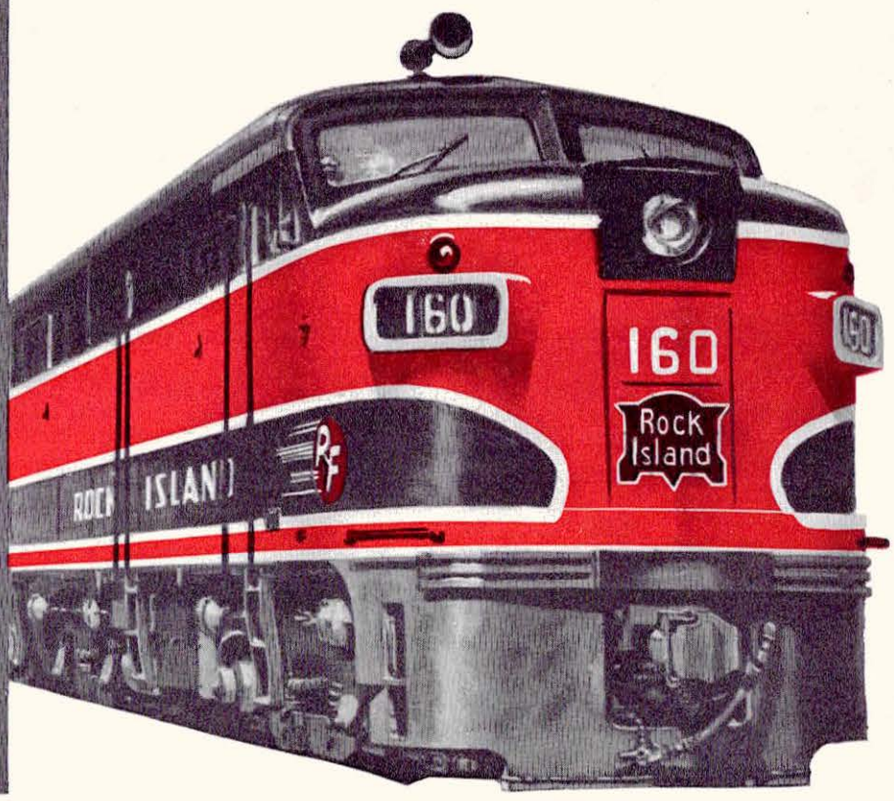

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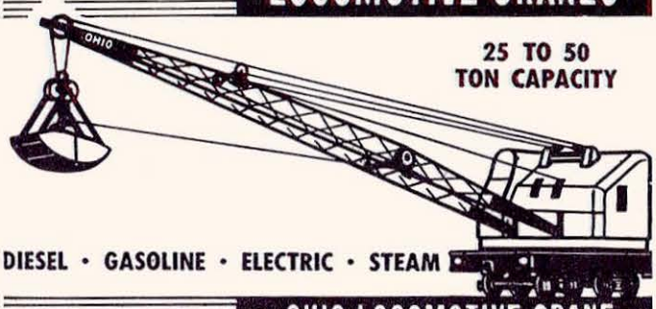

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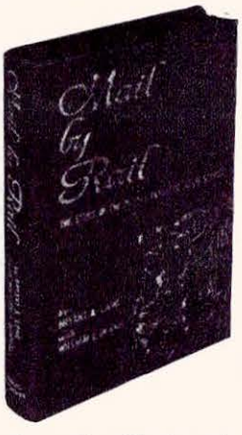

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Advertisers IN THIS ISSUE

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A

Aaron & Bros., Inc., E. A. 188
Adams & Westlake Company, The 35
Agency—Henri, Hurst & McDonald, Inc.
Adeco Products, Incorporated 180
Air Reduction Sales Company 48
Agency—G. M. Basford Company
Aluminum Company of America 94
Agency—Fuller & Smith & Ross, Inc.
American Brake Shoe Company, National Bearing Division 198
Agency—Fuller & Smith & Ross, Inc.
American Bridge Division 67
Agency—Batten, Barton, Durstine & Osborn, Inc.
American Car and Foundry Company 40, 41
Agency—Hicks & Greist, Inc.
American Creosoting Company, Inc. 49
Agency—Russell T. Gray, Inc.
American Hoist & Derrick Company 46
Agency—Alfred Colle Co.
American Locomotive Company 20, 21
Agency—G. M. Basford Company
American Steel Foundries 10
Agency—Erwin, Wasey and Company, Inc.
Apex Railway Products Co. 47
Agency—W. S. Kirkland Advertising
Automatic Electric Sales Corporation 4
Agency—Proebsting-Taylor, Inc.

B

Barco Manufacturing Co. 34
Agency—Armstrong Advertising Agency
Bethlehem Steel Company 3
Agency—Jones & Brakeley, Inc.
Bledsoe Company, Walter 193
Buckeye Steel Castings Company, The 23
Buffalo Brake Beam Co. 2
Budd Company, The 60, 61
Agency—Lewis & Gilman, Inc.

C

California Company, The 85
Agency—Batten, Barton, Durstine & Osborn, Inc.
Camden Welding Company 94
Canadian Cardwell Co., Ltd. 44
Agency—Van Auken, Ragland & Stevens
Cardwell Westinghouse Co. 44
Agency—Van Auken, Ragland & Stevens
Caterpillar Tractor Co. 71
Agency—N. W. Ayer & Son, Inc.
Chicago, Rock Island and Pacific Railroad 24, 25
Agency—Henri, Hurst & McDonald, Inc.
Coleman & Sons, D. 188
Agency—Admakers
Combustion Engineering-Superheater, Inc. 170
Agency—G. M. Basford Company
Conley Frog & Switch Company 45

D

Darien 196
Duner Company 193

E

Eastman Kodak Company 75
Agency—J. Walter Thompson Company
Edwards Company, The O. M. 94
Agency—Moser & Cotins
Edgewater Steel Company 53
Agency—Walker and Downing
Edison, Incorporated, Thomas A. 51
Agency—Lasky Company
Electric Storage Battery Co., The 187
Agency—Geare-Marston, Inc.
Electric Tamper & Equipment Co. 9
Agency—Stevens, Inc.
Electro-Motive Division, General Motors Corp. 80, 81
Agency—Kudner Agency, Inc.
Enterprise Railway Equipment Company 43
Agency—The Advertising Corporation
Ex-Cell-O Corporation 194
Agency—Holden, Clifford, Flint, Inc.
Esso Standard Oil Company 166
Agency—McCann-Erickson, Inc.

F

Fairbanks-Morse & Co. 50
Agency—The Buchen Company
Franklin Railway Supply Company 177
Agency—G. M. Basford Company

G

General Electric Company 20, 21
Agency—G. M. Basford Company
General Steel Castings 163
Agency—Oakleigh R. French & Assoc.
Goodall Fabrics, Inc. 86
Agency—Ruthrauff & Ryan, Inc.
Graybar Electric Co., Inc. 52
Agency—G. M. Basford Company
Griffin Wheel Company 37
Agency—W. S. Kirkland Advertising
Grinnell Company, Inc. 59
Agency—Horton-Noyes Company
Grip Nut Company 176
Gross & Janes Company 193
Gustin-Bacon Manufacturing Co. 54
Agency—Valentine-Radford Advertising

H

Harrison Radiator Division, General Motors Corporation 38
Agency—Campbell-Ewald Co., Inc.
Hobbs Western Co. 164
Hunt-Spiller Manufacturing Corporation 55
Agency—Charles M. Gray & Assoc.
Hyatt Bearings Division, General Motors Corp. ... 36
Agency—Campbell-Ewald Co., Inc.

I

Illinois Railway Equipment Company 188
Industrial Brownhoist Corporation 66
Agency—Price, Hedrick & Tanner, Inc.
Inland Steel Company 64
Agency—Weiss & Geller, Inc.
Interlake Iron Corporation 164
Agency—The Bayless-Kerr Company
International Harvester Company 58
Agency—Leo Burnett Company, Inc.
International Shoe Company 39
Agency—Henri, Hurst & McDonald, Inc.
Iron & Steel Products, Inc. 196

J

Johns-Manville 84
Agency—J. Walter Thompson Company
Jordan Company, O. F. 56
Agency—Marsteller, Gebhardt and Reed, Inc.
Journal Box Servicing Corp. 174
Agency—W. S. Kirkland, Advertising

K

Kerite Company, The 63
Agency—O. S. Tyson & Co., Inc.
Koppers Company, Inc. 57
Agency—Batten, Barton, Durstine & Osborn, Inc.

L

Lewis Bolt & Nut Company 188
Agency—Ruthrauff & Ryan, Inc.
Lilly-Tulip Cup Corporation 65
Agency—Al Paul Lefton Co., Inc.
List and Weatherly Construction Co. 90

Cont'd

M

Magnus Chemical Company 178
Agency—Spooner & Kriegel
Mall Tool Company 185
Agency—Paulson-Gerlach & Assoc., Inc.
Martin-Roasa Tractor & Equipment Co. 164
Massey Concrete Products Co. 194
Met-L-Wood Corporation 22
Agency—Armstrong Advertising Agency
Miner, Inc., W. H. 168
Morton Manufacturing Company 68
Agency—Hamilton Advertising Agency, Inc.
Motor Wheel Corp. 173
Agency—W. S. Kirkland Advertising
Motorola 26, 27
Agency—Ruthrauff & Ryan, Inc.

N

National Bearing Division, American Brake Shoe Company 198
Agency—Fuller & Smith & Ross, Inc.
National Malleable and Steel Castings Company 73
Agency—Palm & Patterson, Inc.
Northwestern Blaugas Company 192
Agency—Harold C. Walker, Advertising

O

Oakite Products, Inc. 190
Agency—Rickard and Company
Ohio Locomotive Crane Co., The 197
Agency—Coleman Todd & Assoc.
Okonite Company, The 96
Agency—Doyle, Kitchen & McCormick, Inc.
Olson Rug Company 192
Orton Crane & Shovel Co. 175
Agency—W. S. Kirkland, Advertising
Oxweld Railroad Service Company, Division of Union Carbide and Carbon Corp. 161
Agency—J. M. Mathers, Inc.

P

Paper-Calmenson & Company 192
Agency—Foulke Agency, Inc.
Paper Manufacturers Co. 186
Agency—Charles A. White, Jr. & Company
Peerless Equipment Company 77
Agency—George Bentley & Assoc. Inc.
Pressed Steel Car Company, Inc. 62
Agency—Albert Frank-Guenther Law, Inc.
Pullman-Standard Car Manufacturing Company 30, 31
Agency—Fuller & Smith & Ross, Inc.
Pyle-National Company, The 90
Agency—Calkins & Holden, Carlock, McClinton & Smith, Inc.

Q

Q and C Company, The 192

R

Rail Joint Company Inc., The 76
Railway Educational Bureau, The 196
Railway Steel-Spring Division of American Locomotive Company 42
Agency—Hazard Advertising Company
Reade Manufacturing Co., Inc., The 74
Remington Rand Inc. 72
Agency—Leeford Advertising Agency, Inc.
Republic Steel Corporation 83
Agency—Meldrum and Fewsmith, Inc.
Reynolds Metals Company 201
Agency—Buchanan & Company, Inc.
Rock Island 24, 25
Agency—Henri, Hurst & McDonald, Inc.
Roll-A-Reel 193
Agency—Julian J. Behr Company
Ross and White Company 190
Rust-Oleum Corporation 89
Agency—O'Grady-Andersen-Gray, Inc.
Ryerson & Son, Inc., Joseph T. 19
Agency—Aubrey, Finlay, Marley & Hodgson Inc.

S

Scullin Steel Company 191
Agency—Batz-Hodgson-Neuwoehner Advertising Agency
Signode Steel Strapping Company 186
Agency—The Buchen Company
Simmons-Boardman Publishing Corp. 70, 181-184
Sinclair Refining Company 28, 29
Agency—Morey, Humm & Johnstone, Inc.
Snow Construction Co., T. W. 79
Standard Car Truck Company 78
Agency—Van Auken, Ragland & Stevens
Standard Oil Company of California 85
Agency—Batten, Barton, Durstine & Osborn, Inc.
Standard Oil Company of Indiana 91
Agency—McCann-Erickson, Inc.
Standard Oil Company of Texas 85
Agency—Batten, Barton, Durstine & Osborn, Inc.
Standard Railway Equipment Manufacturing Company 69
Agency—W. S. Kirkland Advertising
Stanhope 196
Stucki Co., A. 194
Superheater Company, Inc., The 170
Agency—G. M. Basford, Company
Superior Car Door Company 172
Agency—W. S. Kirkland Advertising
Sutherland Paper Company 192
Agency—Staake & Shoonmaker Company

T

Texas Company, The 92
Agency—Erwin, Wasey & Company, Inc.
Timken Roller Bearing Company, The ....Back Cover
Agency—Batten, Barton, Durstine & Osborn, Inc.
T-Z Railway Equipment Co. 173
Agency—W. S. Kirkland Advertising

U

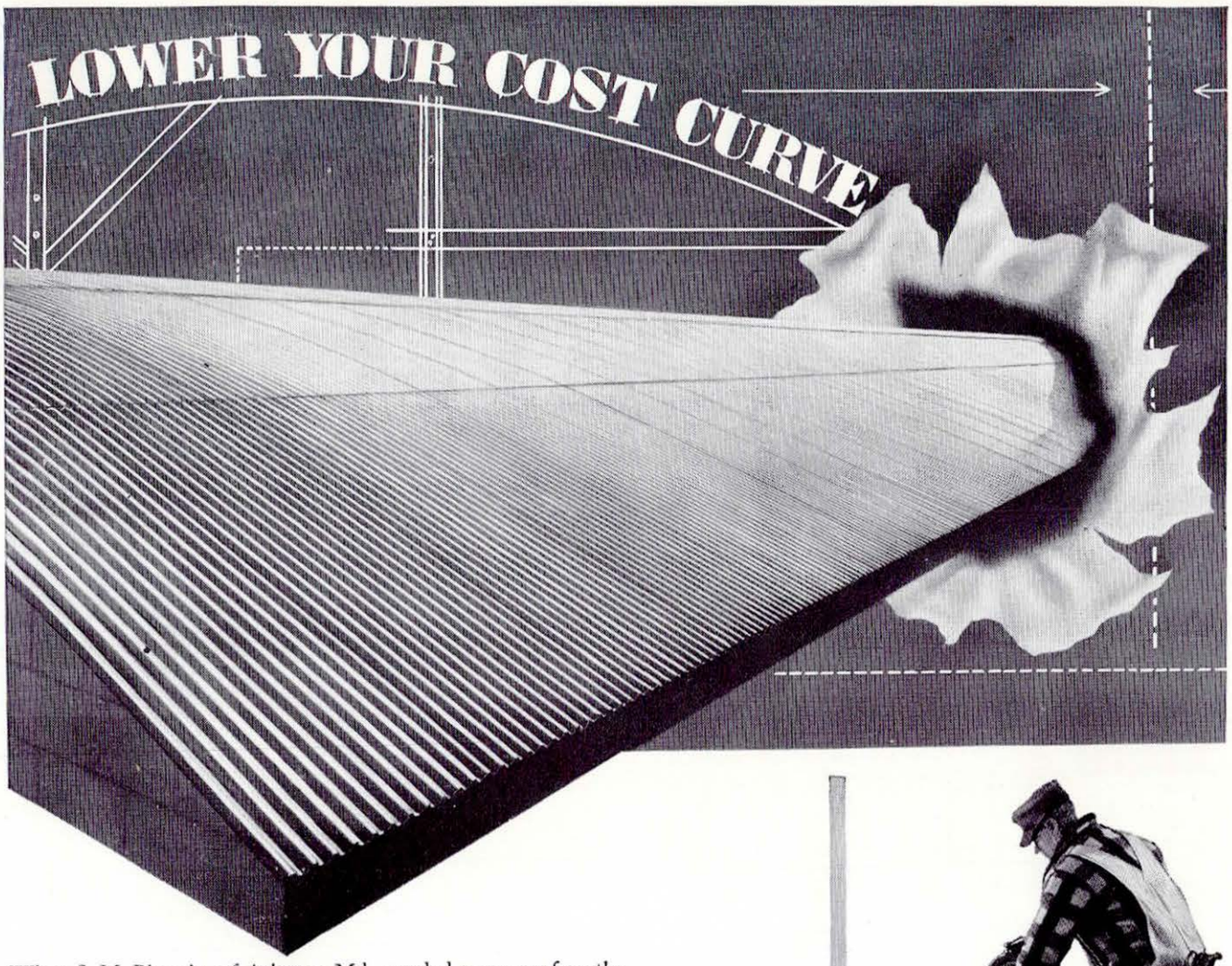
Union Asbestos & Rubber Company 87
Agency—William Hart Adler, Inc.
Union Carbide and Carbon Corporation, Oxweld Railroad Service Company 161
Agency—J. M. Mathes, Inc.
Union Switch and Signal 6
Agency—Ketchum, MacLeod & Grove, Inc.
Unit Truck Corporation 2
United States Steel Company 67
Agency—Batten, Barton, Durstine & Osborn, Inc.

V

Vierling Steel Works 194

W

Waukesha Motor Company 88
Agency—The Cramer-Krasselt Co.
Western Railroad Supply Co. 83
Agency—L. H. Gross & Associates
Westinghouse Electric Corporation 32, 33
Agency—Fuller & Smith & Ross, Inc.
Willson Products, Inc. 180
Agency—Beaumont, Heller & Sperling, Inc.
Wine Railway Appliance Co., The .....Front Cover
Agency—Beeson-Faller-Reichert, Inc.
Wix Accessories Corp. 189
Agency—Humbert & Jones
Woodings Forge & Tool Co. 195
Agency—W. S. Kirkland Advertising
Woodings-Verona Tool Works 195
Agency—W. S. Kirkland Advertising
Woolery Machine Company 179
Agency—W. S. Kirkland Advertising



When S. M. Pistorio, of Arbutus, Md., needed a new roof on the curved wood trusses of his big warehouse, he found he could save on initial cost and lower his cost curve through the years with Reynolds *Lifetime* Aluminum Industrial Corrugated.

In this case, 11-foot sheets were used, curved at the site. For other curved roofs, Reynolds can supply curved sheets on request—minimum radius 5′. However, this special use only serves to demonstrate the versatility of aluminum industrial corrugated. On any type of roof it gives the owner the advantages of freedom from rust without protective painting, plus the radiant heat reflectivity that keeps interiors cooler in summer, warmer in winter.

The lighter weight of this roof (56 pounds per square) was especially important on this wood-trussed warehouse. On new buildings this factor can mean substantial savings on framing.

Call Reynolds for technical assistance and application details . . . offices in principal cities. For literature, write to Reynolds Metals Company, Building Products Division, 2040 South Ninth Street, Louisville 1, Kentucky.

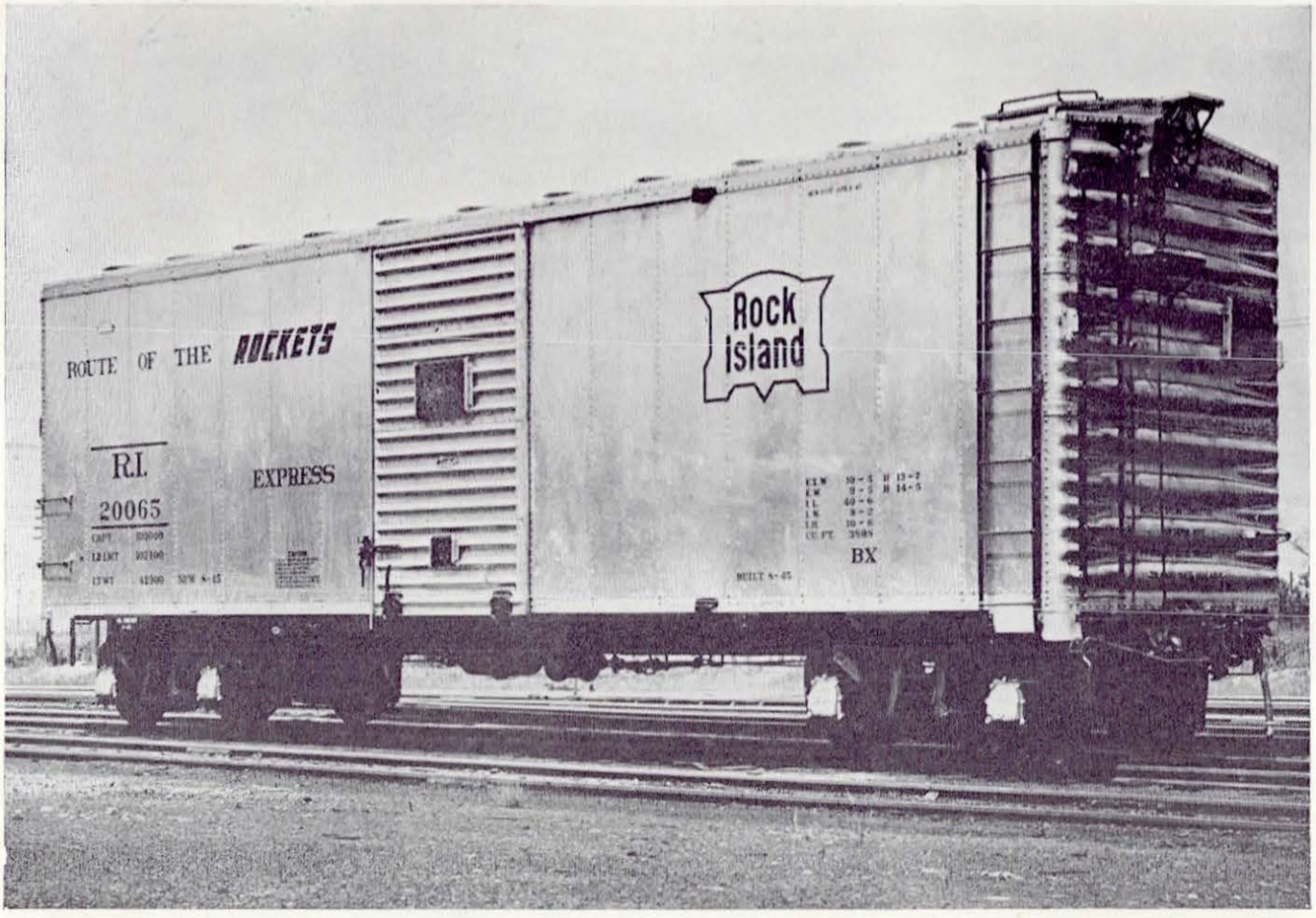
Specifications:

Thickness .032″
Corrugations 7/8″ deep, 2-2/3″ crown to crown
Uniform load support (roof) 80 p.s.f. on 4′ purlin spacing
Uniform wind load capacity (siding) 20 p.s.f. on girt spacing up to 7′9″
Roofing width 35″, coverage 32″
Lengths 5′, 6′, 7′, 8′, 9′, 10′, 11′, 12′

Military demands for aluminum reduce supply, but Reynolds is rapidly expanding aluminum capacity. Rated orders receive priority handling.

REYNOLDS *Lifetime* ALUMINUM INDUSTRIAL CORRUGATED

Rock Island's "Roller Freight" eliminates journal inspection between terminals, goes 5,000,000 car-miles without a "hot box"



One of Rock Island's five Timken bearing equipped freight cars used for head end passenger service between Chicago and Los Angeles.

ALL the way from Chicago to Los Angeles without a journal inspection! It's all in a day's work to five of Rock Island's aluminum freight cars used for head end passenger service. That's because the cars roll on Timken® tapered roller bearings.

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Oil level in the Timken bearing equipped journals is checked at the beginning and end of the run, no inspections are required between terminals. By contrast, freight cars on friction bearings making the same run require oiling and packing adjustments at four points along the route as well as at Chicago and Los Angeles.

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When all railroads go "Roller Freight", they'll save $190,000,000 annually, net an estimated 22% on their investment.

For complete information on the cost-saving advantages of "Roller Freight", write The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

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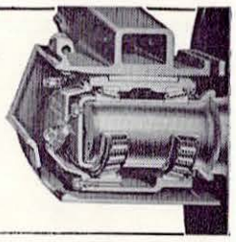

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